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**THE CHOICE OF MODE FOR REGULATION: A CASE STUDY
OF THE FEDERAL PESTICIDE REGISTRATION REVIEW, 1988-1992**

BY

MARGARET M. HILL

**A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy**

Department of Political Science

**Carleton University
Ottawa, Ontario**

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**THE CHOICE OF MODE FOR REGULATION: A CASE STUDY OF THE FEDERAL
PESTICIDE REGISTRATION REVIEW, 1988-1992**

submitted by

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in partial fulfilment of the requirements
for the degree of Doctor of Philosophy

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Thesis Supervisor

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November 25, 1994

ABSTRACT

Political scientists, economists and students of public policy interested in government regulation have contributed to an extensive literature on why and when government intervenes in the market and on the effects of regulation. Very little is known, however, about the choice of means for regulation. This dissertation is the first systematic analysis of the choice that must be made regarding the administrative machinery for government regulation, or the mode for regulation. Two specific issues are addressed: what are modes for regulation?; and what factors explain the choice amongst alternative modes?

The dissertation investigates these basic questions through a unique theoretical framework developed in Part I. The central thesis is that the choice of mode for regulation is a policy community-wide exercise in organizational design and is shaped by and reflects the interaction of three variables: interest politics, mode paradigms (or ideas and beliefs about the mode for regulation) and decision styles (i.e. the formal and informal rules and procedures for selecting a mode). The dissertation also breaks new ground in arguing for a mode concept based on three independent and potentially substitutable elements - structure, resources (budgets and qualified staff) and processes (for dealing with political actors with roles in regulation, and for making regulatory decisions) - which can be crafted into machinery for delivering regulatory policies and

programmes. This understanding of modes for regulation implies, in turn, great diversity in the options available to policy communities. The dissertation's overall theoretical framework on mode choices is derived from the literature on regulation, policy instruments, policy communities and government (re)organization.

The dissertation's perspective on choosing modes for regulation is examined through a case study of the 1988-92 federal pesticide registration review (PRR) in Part I. The PRR was an innovative initiative in regulatory reform that produced a pair of verdicts on the mode for regulation for Canada's pesticide registration system. It therefore offers an excellent opportunity to fill an important gap in the theoretical foundations of the study of regulation. The field research for the PRR case study was conducted in 1991-93 and involved a large number of personal interviews with members of the pesticide policy community and analysis of more than 1,150 documents.

The interest politics-mode paradigms-decision style framework is evaluated and refined in the dissertation's last chapter. The main strength of the dissertation's approach is the rich, comprehensive and dynamic explanation it yields. This is an especially apposite and welcome development in the context of today's debate about "reinventing" government. A number of avenues for further research are discussed. Amongst the most promising is testing the hypothesis that the design of government

machinery - for regulation and, potentially, for other purposes as well - follows the model of a state-directed policy community.

To the Memory of Arthur M. Hill.

*As a career public servant at
the Privy Council Office, 1915-1964,
he witnessed and was part of the
emergence of the regulatory
state in Canada.*

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To Professor Bruce Doern, who has always gone above and beyond the call of duty on my behalf from the very first day I walked into his office in January 1987 in search of another person who found the regulatory state as fascinating as I did. Throughout my doctoral studies and especially as my thesis supervisor, he has continually encouraged me - politely and professionally, of course - to push my thinking one step further. At a more personal level, I give him tremendous credit and thanks for instilling a young scholar with self-confidence.

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Finally, to fax machines and (deregulated) long-distance telephone service between Ottawa and south-west England. Without them too, the dissertation would not have been possible.

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Chapter 1

INTRODUCTION

Political scientists, economists and students of public policy interested in government regulation have contributed to a rich literature on why and when government intervenes in the market and on the effects of regulation. Much less is known, however, about what Charles Schultze calls the second dimension of the regulatory process, namely the choice of means for regulation.¹ Choices are made about the regulatory instrument's form (e.g. centralized legal commands or decentralized economic incentives)² and, in federal states, about the level of government that regulates (e.g. provincial or federal)³. Another crucial choice

¹ The same point has been made in a Canadian context by Schultz. In a 1982 review article on public administration's contribution to the study of regulation, Schultz is highly critical of the "all too common bias" (at p. 639) of academics, public servants and elected officials to assume that the means to achieve the ends of public policy are of little consequence. He recommends that future research be directed at the methods for effective regulation and the political and institutional features of the regulatory process. See Richard Schultz, "Regulation and Public Administration," CPA, 25:4 (winter 1982), pp. 638-652.

² This is the issue examined in Bruce A. Ackerman and William T. Hassler's excellent case study of the U.S. Environmental Protection Agency, Clean Coal/Dirty Air (New Haven: Yale University Press, 1981) and, to a lesser degree, in Brian J. Cook, Bureaucratic Politics and Regulatory Reform: The EPA and Emissions Trading (New York: Greenwood Press, 1988).

³ The influence of federalism on regulation, in particular its consequences for the level of inter-governmental conflict in the regulatory arena, is examined in Richard Schultz and Alan Alexandroff, Economic Regulation and the Federal System, vol. 42 in the series of studies commissioned by the Royal Commission on the Economic

variable is the organizational arrangement for regulation, or what is termed here the mode for regulation. As one of the eminent scholars of regulation, James Q. Wilson, has observed, vastly improved knowledge about why particular organizational arrangements are chosen is essential if we are to close significant gaps in our understanding of the nature of government regulation.⁴

The dissertation contributes to theoretical development in this unexplored area. Two major research questions are investigated: 1) What are modes for regulation?; and 2) What factors account for the choice amongst alternative modes?

Part I of the dissertation builds a theoretical framework for looking at these questions from the literature on regulation, policy instruments, policy communities and government (re)organization. The choice of mode is presented as an exercise in designing the administrative machinery of government and, more specifically, in mixing structure, resources and processes into organizational arrangements for delivering regulation. The dissertation contends that choices about the mode for regulation reflect interplay at the level of the policy community amongst three variables: interest politics, mode paradigms and decision styles.

Union and Development Prospects for Canada (Toronto: University of Toronto Press, 1985).

⁴ James Q. Wilson, "Neglected Areas of Research on Regulation," in Roger G. Noll, ed. Regulatory Policy and the Social Sciences (Berkeley: University of California Press, 1985), pp. 357-363, at pp. 357-8.

The dissertation's theoretical perspective is examined, in Part II, through a case study of the 1988-92 federal pesticide registration review. The pesticide review provides an excellent opportunity to clarify the politics of choosing modes for regulation, in particular how diverse actors from state and society with interests in pesticide registration viewed the mode for regulation and sought, in many instances, to use its reform to address political and administrative objectives.

The dissertation's three-part framework - interest politics, mode paradigms and decision styles - is evaluated in Chapter 8. The pesticide registration review case study suggests several important revisions and refinements. A more satisfactory explanation of the choice of mode for regulation - and one suitable for further research in the future - is the result.

1.0 THE RESEARCH PROBLEM: TOWARDS A THEORETICAL PERSPECTIVE ON THE CHOICE OF MODE FOR REGULATION

1.1 The Concept of a Mode for Regulation

The first research objective is to clarify the nature of the dependent variable. The position in the dissertation is that the mode for regulation is a matter of government organization, the administrative machinery by which government regulates.

Viewing the mode in this way is unconventional. The literature on regulation generally assumes three possible modes: regulation by an executive department of government, regulation by an independent regulatory agency and self-regulation. The modes are defined and distinguished by where they locate responsibility for exercising regulatory authority. Under the regulatory department mode, responsibility for regulation resides in an elected minister. The independent agency mode vests responsibility in an appointed body, usually a collective board. In the third mode, self-regulation, regulatory authority is delegated by the legislature to producer interests in the private sector. The customary understanding of modes for regulation, focussing as it does on legal accountability relationships, owes much to formal, highly structural perspectives on public administration.

An alternative understanding of modes for regulation is developed conceptually and used here. Taking a cue from organization theory and recent work on government (re)organization, the dissertation presents the mode as a multi-layered organizational arrangement. Structure - in particular, the locus of responsibility for regulation (e.g. a minister or an appointed board) and the regulator's mandate - is perhaps the most obvious element. There are two others. The first is resources, that is what the regulatory authority has and does not have to accomplish its mandate and objectives. Key amongst the resources are a budget and qualified personnel. The third element of any mode for regulation are the processes by which the regulator makes decisions and relates to other political actors with roles in regulatory decision-making. Structure, resources and processes are taken together in the dissertation to constitute a mode or organizational arrangement for regulation.

The attraction of seeing the mode for regulation in this way is that it allows for more meaningful discussion and comparison of alternative delivery mechanisms for regulation. Asking why legislators delegate regulatory authority to ministers in some cases and to independent agencies in others is simply the wrong question. It misses much of the subtlety in the administrative machinery in place at the federal and provincial levels in Canada for regulation. It also assumes that the precise shape of an agency or a departmental arrangement is inconsequential. The dissertation's concept of a mode for regulation, on the other hand, takes differences - in structural

characteristics and in internal administrative factors, such as resources and processes - into serious account.

The dissertation's concept of modes for regulation also has the merit of facilitating investigation of several propositions about reforming the machinery for government regulation. Most important, it treats structure, resources and processes as potentially independent elements. A number of empirical and theoretical works on government reorganization lead us to suspect two things about modes for regulation: first, that political actors are not indifferent to structure, resources and processes as organizational solutions to particular problems and, second, that there are significant differences in the ease with which each of these elements of a mode for regulation can be changed. The last proposition has particular salience when one or another avenue of reform is blocked for any reason. It may still be possible, despite the constraint, to satisfy political actors' demands for change within the rubric of organizational reform.

Another advantage relates to the underlying reasons for pursuing knowledge about modes for regulation. One of the rationales is that, as Wilson puts it, "how government organizes itself may make a difference"⁵. Studies are inconclusive, at best, about the determinants of government performance. Nevertheless, work by

⁵ Ibid., p. 359.

Szanton, March and Olsen and Seidman and Gilmour⁶ in the 1980s on reorganizing the state's administrative machinery leaves us with the impression - and perhaps the hope - that the performance of government is affected not only by the formal structure adopted, say, for regulation, but also by what that structure does and how it does it. A more refined mode concept represents an advance toward eventually being able to test this proposition in the regulatory area, to disentangle the dynamics around some of the organizational determinants of "smarter" regulation. At a minimum, it encourages more creative thinking about organizational or machinery solutions to regulatory failure.

1.2 Explaining the Choice of Mode for Regulation

The dissertation's second research objective is to investigate the determinants of mode choices. We characterize the choice of mode for regulation as a policy community process in organizational design. The outcomes of this process are decisions about the preferred mode for regulation, that is the preferred bundle or mix of structure, resources and processes. As for the decisions/choices themselves, it is

⁶ See Peter Szanton, "So You Want to Reorganize the Government?" in Szanton, ed. Federal Reorganization: What Have We Learned? (Chatham, NJ: Chatham House, 1981), pp. 1-24; James G. March and Johan P. Olsen, "Organizing Political Life: What Administrative Reorganization Tells Us About Government," APSR, 77:2 (June 1983), pp. 281-296; and Harold Seidman and Robert Gilmour, Politics, Position, and Power: From the Positive to the Regulatory State, 4th ed. (New York: Oxford University Press, 1986).

proposed that they are the product of interplay over time amongst three variables: 1) political actors from state and society who, because they have interests in an area of regulation, are members of the policy community; 2) policy community members' ideas and beliefs concerning the mode for regulation; and 3) the nature of the arena in which decisions about the mode for regulation are taken.

The first contention is that members of the policy community are the ones who participate in the choice process. The second is that these political actors have distinctive beliefs or understandings about the mode for regulation, for instance the mode's relationship to regulatory failure, the goals to be accomplished through reform, what the mode options are and the criteria for choosing between them. The third contention is that the rules and practices for arriving at decisions about the organizational arrangement for regulation exert an independent influence on the distribution of power in the policy community. The dissertation's central proposition follows: that the policy community's choice of organizational design can be explained by reference to the actions taken by community members to affect the mode outcome, their different mode paradigms and the prevailing decision style for reaching a verdict on the desirable bundle of structure, resources and processes.

The dissertation's theoretical approach to explaining the choice of mode for regulation departs from existing literature, but also builds on it. The mode issue has so far received limited, highly speculative scholarly attention. The most helpful

insights - from research on regulatory agencies, types of regulation and policy instruments - are critically examined in Chapter 2. The discussion there suggests that the roots of a more satisfactory account of the choice of mode for regulation may be found in the approach developed in the dissertation. The case for the dissertation's perspective on the choice of mode is argued more completely and fully in Chapter 3.

2.0 JUSTIFICATIONS FOR RESEARCH

The dissertation's main contribution is the development of a more satisfactory conceptualization and explanation of the choice of mode for regulation. Insight is gained into the nature of modes for regulation as well as into the factors affecting the choice amongst alternative modes. This is important for a number of reasons.

On the theoretical side, there is growing academic interest in the administrative and political consequences of institutional design.⁷ If we are ultimately interested in testing the hypothesis that the way government is organized for regulation makes a difference⁸, as both Wilson and Schultz recommend, a logically prior question, and

⁷ See, e.g., Joel D. Aberbach and Bert A. Rockman's excellent article "Does Governance Matter - And If So, How?: Process, Performance, and Outcomes," *Governance*, 5:2 (April 1992), pp. 135-153.

⁸ Interestingly, this issue is addressed through the backdoor in one of the few analyses of pesticide regulation. See Brendan Gillespie, Dave Eva and Ron Johnston, "Carcinogenic Risk Assessment in the United States and Great Britain: The Case of

the one pertinent here, is why there are different modes in the first place. To answer it, we must piece together - and sometimes go beyond - the fragmentary propositions distillable from existing knowledge.

A coherent theoretical perspective on the mode question helps to fill a vacuum manifested by the North American experience with regulatory reform in the 1980s. It is widely recognized that last decade's reforms exposed the inadequacies of many theories of regulation.⁹ The suggestion has moreover been made by both Noll¹⁰ and Peltzman¹¹ that thinking about optimal choices of regulatory organization and the impact of organizational structure on regulatory performance should be one of the next objectives for strengthening the theoretical foundation of the study of regulation.

Aldrin/Dieldrin," Social Studies of Science, 9 (1979), pp. 265-301. The authors argue that "the location of regulatory responsibility in different types of agencies will have direct implications for the evaluation of the benefits of pesticides and the hazards associated with their use" (p. 279) and, hence, that it is a determinant of regulatory decisions.

⁹ The limits of theories of regulation in explaining regulatory reform are examined, e.g., in Martha Derthick and Paul J. Quirk, The Politics of Deregulation (Washington, DC: Brookings Institution, 1985), at pp. 13-27, especially pp. 19-27. See also Alfred E. Kahn, "Deregulation: Looking Backward and Looking Forward," Yale J. on Regulation, 7:2 (summer 1990), pp. 325-354.

¹⁰ Roger G. Noll, "Government Regulatory Behavior: A Multidisciplinary Survey and Synthesis," in Noll, ed. Regulatory Policy and the Social Sciences (Berkeley: University of California Press, 1985), pp. 9-63.

¹¹ Sam Peltzman, "The Economic Theory of Regulation After a Decade of Deregulation," in M.N. Bailey and C. Winston, eds. Brookings Paper on Economic Activity: Microeconomics (Washington, DC: Brookings Institution, 1980), pp. 1-59.

Investigation of organizational arrangements for regulation is especially timely in the 1990s. Realignment of the regulatory state is well underway. While regulation was a discredited instrument in the eyes of many academics and policy actors in the 1980s, today it is increasingly conceded that new forms of regulation, not its absence, may be the best means to achieve public policy goals in some areas. For evidence, look to the many countries around the globe that have lately "embarked on 'a new era of institutional innovation' as they seek to perform more satisfactorily what they deem to be continuing public responsibilities".¹² The salience of modes for regulation is also accentuated in the age of third-party government since each mode has different implications for the exercise of public power, its control and accountability.¹³ In the end, reforming organizational arrangements for regulation may be a way for governments to increase their capacity to regulate - and govern - "smarter".

Reorganization of regulatory regimes constitutes a forgotten side of regulatory reform. Academic debate about reforming regulation has generally been conducted in terms of a choice between the market and government as two alternative decision-

¹² Richard Schultz, "Privatization, Deregulation and the Changing Role of the State," Business in the Contemporary World, III:1 (autumn 1990), pp. 25-32, at p. 29, citing Cento Veljanovski, Selling the State: Privatization in Britain (London: Weidenfeld and Nicolson, 1987), p. xii.

¹³ The phenomenon of third-party government is explored in Lester M. Salamon, "Rethinking Public Management: Third-Party Government and the Changing Forms of Government Action," Public Policy, 29:3 (summer 1981), pp. 255-275. Donald F. Kettl stresses the effects of this new form of governance for traditional conceptions of political accountability in his Government By Proxy: (Mis?)Managing Federal Programs (Washington, DC: Congressional Q. Inc., 1988).

makers. The idea of regulating more effectively through reorganization, for instance moving from a department-based mode to an agency one (or vice versa), has attracted virtually no scholarly attention. Government policy-makers, on the other hand, continue to be intrigued by it. Repeated suggestions in Canada to consolidate regulatory programmes concerned with food inspection in a single agency testify to this.¹⁴ So too does the recent pesticide registration review (see Section 3.0 below). If reorganization and relocation of regulatory responsibility are viable ways to improve regulatory performance, we need to know much more about the options available and the factors at work in the choice process.

A general framework to guide policy-makers in considering the appropriate modes for regulatory programmes and policies unfortunately remains elusive. Over four decades after Willis first recognized the significance of independent regulatory boards in Canada but was at a loss to explain why Canada had departed from the British tradition of assigning new regulatory responsibilities to elected ministers,¹⁵ the Nielsen Task Force's Study Team on Regulatory Programs observed that there is still "no consensus regarding the criteria for utilizing a regulatory agency, rather than

¹⁴ This possibility was raised, for instance, in the autumn of 1985 in the context of "tunagate", when the federal Minister of Fisheries and Oceans over-ruled a canning inspector's decision to reject a large shipment of tainted tune. A single agency for food inspection was also one of the proposals in the confidential 1991 de Cotret report on reforming the federal government. The objective in the latter case was to "eliminate overlap and duplication in functions."

¹⁵ See John Willis, ed. Canadian Boards at Work (Toronto: Macmillan, 1941).

a government department".¹⁶ Improved knowledge about the choice of mode for regulation will contribute to building the necessary theoretical foundation.

Finally, improved knowledge in this area makes an important contribution to the "reinventing government" debate.¹⁷ Policy-makers and the Canadian public are preoccupied in the early 1990s with redesigning the administrative ship of state to achieve a plethora of public policy goals. A common complaint, however, is that solutions must be proposed and evaluated - and choices made - in the absence of fundamental knowledge about the administrative and political aspects of government organization. Students of public policy and public administration in Canada have been slow to turn their attention to the issues reinventing raises.¹⁸ This dissertation, focussing as it does on modes for regulation and how choices are made between them, is a step towards piecing together a small part of the larger puzzle.

¹⁶ Canada. Task Force on Program Review. Study Team on Regulatory Programs. Regulatory Programs (Ottawa: Minister of Supply and Services, 1986), p. 13.

¹⁷ The standard (popular) reference is David Osborne and Ted Gaebler, Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector (Reading, MA: Addison-Wesley Publishing, 1992). Whether the ideas presented there are qualitatively new or a case of "new wine in old bottles" is open to question. See Charles T. Goodsell, "Reinvent Government or Rediscover It?", PAR, 53:1 (Jan/Feb 1993), pp. 85-87.

¹⁸ This situation has begun to be corrected with publication of Michael J. Trebilcock's The Prospects for Reinventing Government (Toronto: C.D. Howe Institute, 1994). The basic point of departure for Trebilcock is that "difficult theoretical and empirical issues [...] require resolution if a radical transformation of government is to be attempted", let alone succeed (p. 4). His study cuts new ground in wrestling with some of the hard issues.

3.0 THE CASE STUDY

The pesticide registration review (PRR) was an initiative spearheaded by the federal Minister of Agriculture in the spring of 1988 to adapt Canada's system for registering pesticides¹⁹ to changing policies and conditions, both at home and abroad. The first phase of the review centered on the Pesticide Registration Review Team. This group of 12 non-governmental stakeholders submitted a final report of recommendations to the Minister in December 1990 after extensive consultation with the pesticide policy community. The review's second phase saw the formulation of a government response to the Review Team report. A revised regulatory framework was formally announced in February 1992.

The pesticide review offers an excellent opportunity to investigate the dissertation's conceptual framework. First and foremost, there was extensive debate

¹⁹ Registration involves pre-market clearance of pest control products under the Pest Control Products Act, R.S.C. 1985, c. P-9 and is the "front-end" dimension of federal pesticide regulation. There is also a "back-end" where pesticide residue limits are set by the Minister of Health and Welfare as part of the Minister's responsibility for regulating food quality through restrictions on the adulteration of food. See the Food and Drugs Act, R.S.C. 1985, c. F-27. By all accounts front- and back-end pesticide regulation involve completely different policy processes. It is the former which is of immediate interest here. Federal pesticide registration is discussed in detail in Chapter 4.

over the course of the review about the mode issue. This has been exceptionally rare in Canada's regulatory history.²⁰

The pesticide review is also instructive because it involved two clearly identifiable - and different - choices about the mode for regulation. The first was reflected in the Review Team's December 1990 final report. The Review Team recommended that responsibility for pesticide registration be moved from the Minister of Agriculture to a new arm's-length Pest Management Regulatory Agency reporting to the Minister of Health and Welfare. The agency was to be allocated "sufficient funding [...] to ensure it can effectively and efficiently carry out its mandate".²¹ The Review Team's report also prescribed four separate divisions for the agency's audit and enforcement, information and communication, policy development and product management functions.

²⁰ The very limited nature of public discussion about the choice of mode for regulation is a primary theme in Carman D. Baggaley's study for the Economic Council of Canada's Regulation Reference. See The Emergence of the Regulatory State in Canada, 1867-1939, technical report no. 15 (Ottawa: Economic Council of Canada, 1981). The case of the Board of Railway Commissioners may be an important exception to the general rule. In a recent article, Bernard J. Hibbitts argues that debate about the Board's creation was dominated by concern about the form of regulation, as opposed to ideology. See "A Change of Mind: The Supreme Court and the Board of Railway Commissioners," (winter 1991), XLI:1 U of T Law J., pp. 60-113.

²¹ Canada. Pesticide Registration Review Team. Recommendations for a Revised Federal Pest Management Regulatory System: Final Report (Ottawa: Minister of Supply and Services, December 1990), p. 6.

The federal government's response to the Review Team report represented a second choice. The revised regulatory system announced in early 1992 retained the existing Minister of Agriculture-centered departmental arrangement. The government promised, however, that the roles of two other departments that assisted in registering pesticides - Health and Welfare Canada and Environment Canada - would be "clearly define[d] and strengthen[ed]".²² A commitment was also made to infuse \$81-million into the registration system over a six-year period.

For both these reasons, the dissertation uses a case study of the pesticide registration review to investigate its theoretical perspective on the choice of mode for regulation. Most of the field research for the case study was conducted over a two and a half year period, from the fall of 1991 to the end of 1993. Another round of primary research was undertaken in the spring of 1994 to take a last, quick look at developments in the mode for regulation.

The case study draws on a very wide range of sources. The secondary material consulted dealt, on the theoretical side, with regulation, policy instruments, policy communities and government (re)organization, as well as, on the empirical side, with pesticide registration/regulation in Canada and other jurisdictions. Access to primary documents in the public and private sectors of the pesticide policy

²² Government of Canada. Canada's Green Plan. News Release. "Federal Pesticide Regulation System Revised", undated (February 1992).

community was also essential. Over 500 documents related to the pesticide review, including working files from the Pesticide Registration Review Secretariat and stakeholders' internal studies, correspondence and memoranda, were studied in order to reconstruct and analyze the 1989-90 and 1991-92 mode outcomes of the PRR. The research also included detailed analysis of the close to 650 briefs submitted to the Review Team.

Finally, the case study relies on a large number of personal and telephone interviews with governmental and non-governmental interests in the policy community, on the pesticide review and the machinery of government. The interviews ranged from short conversations about narrow issues to longer, usually more structured discussions about mode choices in the pesticide review. To encourage interviewees to be forthright and candid and, in a few cases, to make interviews possible, all interviews were conducted on a not-for-attribution basis.

The alternative of using a multiple case design rather than a single in-depth case study was seriously considered. The problems this presented were both conceptual and practical. On the former side, the absence in the literature of well-developed (i.e. highly detailed) models of the choice process put a pressing priority on building and refining a theoretical perspective on the choice of mode for regulation. Relying on existing knowledge to clarify the mode choice through four or so case studies would inevitably have produced superficial description and analysis. A single

in-depth case study, on the other hand, provided the database for exploring, evaluating and polishing a much richer explanatory framework. This is the kind of framework necessary to satisfactorily address the dissertation's two main research questions.

Practical problems were also encountered with a multiple case design.

Preliminary research showed that it would be difficult to find maximally-similar cases for true head-to-head comparison, especially as the literature gave only extremely limited guidance about the similarities that were most relevant to the mode choice. In addition, there were concerns about the confounding influence of time. The universe of regulatory bodies in Canada which are accessible for the purposes of studying the choice of mode for regulation is small. To get a critical mass of choices suitable for comparison, it is necessary to delve deeply into the past. This introduces complications: analysis may inadvertently capture fads or trends in the creation of regulatory bodies, or fundamental shifts in the nature of regulation.²³ The latter is a particular danger if the researcher has opted for tracking evolutions in the mode in a particular area of regulation (e.g. food and drug regulation).

²³ This problem is recognized by Stephen H. Linder and B. Guy Peters in "Instruments of Government: Perceptions and Context," J. of Pub'l. Policy, 9:1 (Jan.-March 1989), pp. 45-58. Linder and Peters argue (at p. 51) that the time period in which a government organization is founded contributes to the development and persistence of a unique set of values and symbols that may be reflected in the choice of policy instrument.

4.0 FORMAT OF THE DISSERTATION

The dissertation has two distinct but related components. Part I, with two chapters, develops the theoretical perspective on choosing modes for regulation. Chapter 2 discovers the building blocks for a coherent theoretical perspective in the literature on regulation, policy instruments, policy communities and government (re)organization. That perspective is developed more fully and refined in Chapter 3.

Part II of the dissertation, with four chapters, is the case study. There, the dissertation's explanatory framework is applied to the mode outcomes of the federal pesticide registration review. Analysis proceeds on two levels. Chapters 4 and 5 deal with the macro dimensions. Chapter 4 sets the historical context for pesticide registration in Canada and Chapter 5 introduces the pesticide review. The case study shifts in the next two chapters to the micro plane. The Review Team's 1989-90 Pest Management Regulatory Agency recommendation is explained as the product of interplay amongst interest politics, mode paradigms and the decision style in Chapter 6. Chapter 7 repeats the analysis for the pesticide review's second mode choice, the federal government's 1991-92 decision to improve the status quo.

Chapter 8 is the final chapter in the dissertation. The major lessons of the case study are reported there. The focus of the chapter is on evaluating and reshaping the

dissertation's theoretical perspective on the choice of mode for regulation in light of the pesticide review experience.

Chapter 2

THE BUILDING BLOCKS FOR A THEORETICAL PERSPECTIVE ON THE CHOICE OF MODE FOR REGULATION

The dissertation's central contention is that the dependent variable, the choice of mode for regulation, is explained by three factors: interest politics in the policy community; mode paradigms or ideas and beliefs about the mode for regulation; and the decision style for selecting the organizational arrangement. The details of this model are elaborated in Chapter 3. The purpose of this chapter is to discuss the origins of the dissertation's theoretical perspective in four bodies of literature, on regulation, policy instruments, policy communities and government (re)organization.

The approach in Section 1.0 is bottom-up. Section 1.1 examines the comparative literature on regulation with a view to locating the choice of mode for regulation in relation to the more general problem of explaining regulatory outcomes. Section 1.2 critically assesses the literature on regulation and policy instruments which has directly or indirectly tackled parts of the mode puzzle. Threads of these various bodies of knowledge give an early indication of the variables and relationships to be woven into a coherent theoretical perspective on the choice of mode for regulation.

The process of building a theoretical framework shifts in Section 2.0 to a top-down method. As shown there, concepts, themes and analytic approaches found in the literature on policy communities and government (re)organization make several key contributions to developing a solid theoretical perspective on choosing modes for regulation.

1.0 EXPLAINING REGULATORY OUTCOMES

The choice of mode for regulation is an example of a regulatory choice or outcome. Insights culled from the larger universe of regulatory outcomes may then, by parallel reasoning, provide valuable guidance about the determinants of mode choices. To this end, Section 1.1 briefly examines some of the most promising explanatory approaches developed in the comparative literature on regulation and their limits.

Section 1.2 refocusses on the choice of mode as a specific regulatory outcome. As already noted in Chapter 1, research on regulation and policy instruments has paid limited, highly speculative attention to the mode issue. Analysis of these streams of scholarship suggests several avenues for an improved perspective on choosing modes for regulation.

1.1 The Comparative Regulation Literature and Regulatory Outcomes

The rich comparative literature on regulation proposes a wide range of theories about the determinants of regulatory outcomes. The dependent variables subjected to analysis include, amongst other things: the substantive content of regulation in different policy fields; specific regulatory decisions; the characteristics of regulatory processes; patterns of interest group behaviour in regulatory regimes; the choice of regulatory instrument; and national styles of regulation. There is considerable debate in the literature about both what the determinants of these outcomes are, and how they influence regulatory outcomes.

Several of the fairly early contributions to the comparative literature emphasized the importance of political institutions and political and administrative values. Brickman, Jasanoff and Ilgen¹ concluded in their cross-national study of toxic chemical regulation that the distribution of regulatory power within government and between state and societal interests (e.g. whether it is fragmented or highly concentrated) and legal and bureaucratic practices are leading factors in regulatory outcomes. The authors claimed that the structural characteristics of the regulatory system "are conditioned in turn by the larger context of state-society relationships",

¹ Ronald Brickman, Sheila Jasanoff and Thomas Ilgen, Controlling Chemicals: The Politics of Regulation in Europe and the United States (Ithaca: Cornell University Press, 1985).

especially different conceptions of the appropriate role of government in society.²

The significance of these factors for regulatory outcomes lies, according to Brickman et al., in their intermediary effects on the nature of interest group politics and the types of policy analysis entering the regulatory process.

Similar arguments were made by Kelman³ and Badaracco⁴. Kelman explained differences in the American and Swedish processes for occupational safety and health regulation in terms of different traditions of business-government relations. To account for similarities in other outcomes, he referred to a common professional ideology amongst regulatory officials. Badaracco's study of vinyl chloride regulation found that particular patterns of institutional arrangements "load[ed] the dice" in favour of cooperative or adversarial regulatory processes.

While these early studies greatly advanced our understanding of regulation in modern capitalist societies, they had shortcomings.⁵ Of critical importance was the crudeness of their models of the politics of regulation. Highly selective sets of

² Ibid., p. 307.

³ Steven Kelman, Regulating America, Regulating Sweden: A Comparative Study of Occupational Safety and Health (Cambridge, MA: MIT Press, 1981).

⁴ Joseph L. Badaracco, Jr., Loading the Dice: A Five-Country Study of Vinyl Chloride Regulation (Cambridge, MA: Harvard Business School Press, 1985).

⁵ For a review of this and related literature see George Hoberg, Jr., "Technology, Political Structure, and Social Regulation: A Cross-National Analysis," Comparative Politics, 18:3 (April 1986), pp. 357-376.

explanatory factors and imprecise causal relations between variables generated interpretations that were not only out of step with the complex realities of regulation, but also hindered assessing the comparative importance of different determinants of regulatory outcomes and integrating knowledge.

Major progress was made in conceptualizing regulatory politics in the 1980s. Derthick and Quirk⁶ used a sophisticated argument about how convergence between three main variables - leadership from regulatory agencies independent of the political executive and unconstrained by rigid mandates and from the courts; economic analysis which was successfully transplanted into political debate; and ineffective industry lobbies - explained deregulation in the airline, trucking and telecommunications sectors in the United States. Harris and Milkis⁷ account of major shifts in trade and commerce and environmental regulation in the Reagan years was based on a conceptual distinction between quantitative shifts in regulation, which result from incremental adjustments in regulatory policy, and qualitative shifts, which emerge from a clash between new and old ideas about the regulatory regime and consequent institutional change. Vogel⁸ also made an important contribution to the push for rigorous statements about the determinants of regulatory outcomes in his comparative

⁶ Derthick and Quirk, The Politics of Deregulation.

⁷ Richard A. Harris and Sidney M. Milkis, The Politics of Regulatory Change: A Tale of Two Agencies (Oxford: Oxford University Press, 1989).

⁸ David Vogel, National Styles of Regulation: Environmental Policy in Great Britain and the United States (Ithaca: Cornell University Press, 1986).

analysis of how the characteristics of political regimes influence national styles of regulation.

The search for more scientific explanations of regulatory outcomes has recently taken another major step forward under the guidance of scholars primarily interested in modelling the new pattern of politics of American pesticide regulation. The reform of pesticide regulation in the United States in the mid 1980s intrigued political scientists and students of public policy and regulation because it defied several basic tenets of interest group theory. It proved particularly difficult to explain why long-time adversaries were suddenly willing to compromise over the terms of a new regulatory system and joined forces to present Congress with a predigested proposal for statutory reform arrived at through private negotiations. The pesticide case also raised important theoretical questions about the effectiveness of the Reagan administration's attack on regulation.

The question both Bosso⁹ and Nownes¹⁰ ask is: Why did Congress not legislate a new regulatory framework despite the formation of a powerful pro-reform coalition of non-governmental interests? Taking their cue from recent developments in policy theory, the two scholars look to the post-war pesticide policy sub-system for

⁹ Christopher J. Bosso, "Transforming Adversaries into Collaborators," Policy Sciences, 21:1 (1988), pp. 3-22.

¹⁰ Anthony J. Nownes, "Interest Groups and the Regulation of Pesticides: Congress, Coalitions, and Closure," Policy Sciences, 24:1 (1991), pp. 1-18.

an explanation. According to Bosso, the answer lies largely in the dynamics of a temporary coalition representing environmentalists and the chemical pesticide industry, the factors driving its formation and the politics of compromise precipitating its premature demise. A highly fragmented policy process, he says, also stands in the way of Congress moving expeditiously on policy proposals prepackaged by private interests.

Nownes takes issue with Bosso's explanation, arguing that it is not subtle enough. Following Kingdon,¹¹ Nownes claims that it is necessary to make use of the agenda-setting/alternative specification distinction to genuinely understand the roles of organized interests and Congress in the policy process. The lesson Nownes draws from the pesticide case is that Congress' autonomy is substantially enhanced in the alternative specification stage of the policy process when the level of conflict in the policy sub-system rises because of the limits of coalition-building. No coalition can pretend to be all-inclusive. On the contrary, there will always be members of the sub-system who, excluded from the dominant coalition, try to influence policy-making by lobbying Congress and the bureaucracies that support it. Nownes contends that Congress has an enlarged capacity to evade prepackaged policies as a result.

¹¹ John W. Kingdon, Agendas, Alternatives, and Public Policies (Boston: Little, Brown, 1984).

As students of policy theory, Bosso and Nownes share a concern with the determinants of policy change. They both conclude, in the end, that the pattern of interest politics in the pesticide policy sub-system constrained regulatory reform in the Reagan years. More important, for the purposes of the dissertation, is the possibility their work raises of explaining other regulatory outcomes through the related concept of policy community. The direction in which this small pesticide literature has evolved over a short period of time provides encouragement. Bosso and Nownes' research is equally valuable for the specific insights it gives into the politics of pesticide regulation in North America.

1.2 The Literature on Regulation and Policy Instruments and the Choice of Mode for Regulation

The dependent variable in the dissertation is a specific regulatory outcome, the choice of mode for regulation. This section assesses the contributions made by the literature on regulation and policy instruments to constructing a model of how choices are made amongst alternative modes for regulation.

The literature on regulation is the obvious first place to look for an explanation of the mode choice. The issue is addressed in two ways. On the one hand, scholars of regulation have been intrigued by the agency mode ever since a novel

organizational form was adopted to regulate interstate commerce in the United States in 1887. Not surprisingly, then, the question of why agencies are created has been a major theme in research on regulation. The various answers proposed are not explicitly comparative; they shed light indirectly, however, on the perceived shortcomings in regulation by executive department.

Most of the agency literature emphasizes either the administrative rationales for governments choosing the agency mode, or the interests that will be served by this choice. It is frequently argued, for instance, that politicians and bureaucrats are convinced the independent regulatory agency is institutionally more competent for certain purposes. This is the claim in Ackerman and Hassler's recent study of the institutional framework for clean air regulation in the United States.¹² The authors trace the origins of independent regulatory agencies such as the Environmental Protection Agency to policy-makers' acceptance of a series of New Deal ideas about how regulatory administration could be made more efficient and more effective if responsibility for regulation was given, not to the executive branch of government or the courts, but rather to an appointed collective body operating at arm's-length from political control.

Studies of independent agencies in Canada have generally taken a similar approach, albeit less coherently and despite the fact that the tradition of cabinet and

¹² Ackerman and Hassler, Clean Coal/Dirty Air.

parliamentary government means that Canadian regulatory agencies have never been as independent as their American namesakes. If there is a dominant explanation of the origins of Canadian regulatory agencies, it is that they have historically been chosen as a way to depoliticize highly contentious and divisive regulatory issues by relieving politicians of responsibility for resolving them. Other reasons are also said to have been behind creating agencies. Many relate to the presumed ability of the mode to improve regulation through a clear division of labour between elected officials and expert regulators, enlarged opportunities for public participation and greater flexibility in decision-making and other operating practices.¹³ Another alleged advantage is that it is easier for governments to correct a wayward agency decision than a ministerial one. As the Nielsen Task Force's Study Team on Regulatory Agencies discovered, however, these so-called "principles of organization" have never been followed with any consistency at either the federal or provincial level.¹⁴ More convincing perhaps is the emulation argument, that agencies are chosen in Canada when that organizational arrangement is used for the same or similar purposes in other jurisdictions, especially the United States.¹⁵

¹³ G. Bruce Doern speculates about some of these rationales in "Regulatory Processes and Regulatory Agencies," in Doern and Peter Aucoin, eds. Public Policy in Canada (Toronto: Gage, 1979), pp. 158-189, at p. 174.

¹⁴ Canada. Task Force on Program Review. Study Team on Regulatory Agencies. Regulatory Agencies (Ottawa: Minister of Supply and Services, 1986), p. 9.

¹⁵ On Canadian borrowing of U.S. regulatory innovations see George Hoberg, "Sleeping With An Elephant: The American Influence on Canadian Environmental Regulation," J. of Public Policy, II:1 (Jan.-March 1991), pp. 107-132.

The second area in the regulatory literature offering clues about the choice of mode is research on types of regulation. Eads and Fix, McGarity and others¹⁶ claim that economic and social regulation are inherently distinct types of regulation differing in their goals and direction of coverage (i.e. sectoral versus horizontal), the perceived legitimacy of their use by government and the policy considerations and interest groups they invoke. It is also often observed that economic regulation tends to be performed by independent agencies and social regulation by executive departments.¹⁷ The question of whether the type of regulation is in fact a determinant of the mode adopted has escaped investigation, in part because of methodological problems owing to the fact that the agency mode had been largely discredited by the 1960s wave of health, safety and fairness regulation. Nevertheless, the suggestion is at least there in work by Cushman¹⁸ and others that the nature of regulation combines with interest-based politics to affect the choice of mode.

¹⁶ See George C. Eads and Michael Fix, Relief or Reform: Reagan's Regulatory Dilemma (Washington, DC: Urban, Institute Press, 1984), pp. 12-15; and Thomas O. McGarity, "Regulatory Reform in the Reagan Era," Maryland Law Rev., 45:2 (1986), pp. 253-273, at pp. 254-256. The concepts of economic and social regulation are also compared in Peter N. Nemetz, W.T. Stanbury and Fred Thompson, "Social Regulation in Canada: An Overview and Comparison With the American Model," Policy Studies J., 14 (1986), pp. 580-603, although the authors make the observation that the distinction between the two types is often difficult to sustain.

¹⁷ See, e.g., Doern, "Regulatory Processes and Regulatory Agencies", p. 176.

¹⁸ See Robert E. Cushman, "The Problem of the Independent Regulatory Commission," in Dwight Waldo, ed. Ideas and Issues in Public Administration (New York: McGraw-Hill, 1953), pp. 138-155. This is an abridged version of an insightful report Cushman prepared for the famous U.S. President's Committee on Administrative Management, more commonly known as the Brownlow Committee, in 1937. For Cushman's speculations about the choice process, see below in the text.

The most systematic treatment of choosing modes for regulation - and the one with the closest affinity to the dissertation's perspective - is found in the literature on policy instruments. There, the choice of mode is considered an element of the process by which governments choose between alternative policy instruments. The fundamental tenet is that while choice may be an efficiency issue in part, the primary factor in choosing between substitutable modes for regulation is political rationality.

The best expression of this perspective is found in work by Trebilcock, Hartle, Prichard and Dewees.¹⁹ This scholarship sees decisions about the mode for regulation as resolutions of courses of action rationally pursued by political actors - politicians, bureaucrats and interest groups - seeking to maximize their self-interest. The key to unlocking the mode choice, it is claimed, lies in understanding the political rationality of the three games dominated by these actors. Explanation of the mode choice is therefore sought in the leading actors in each game, the quantity and quality of information available to them, the formal and informal rules under which they operate and the goals they pursue as holders of offices and as self-maximizing individuals.

Trebilcock and his colleagues give their model an incomplete test-drive, developing axioms about politicians choosing between an agency and a department.

¹⁹ Michael J. Trebilcock, Douglas G. Hartle, J. Robert S. Prichard and Donald N. Dewees, The Choice of Governing Instrument, a study prepared for the Economic Council of Canada (Ottawa: Minister of Supply and Services, 1982).

The goal assumed to dominate the choice is re-election. Amongst the speculations: that politicians consider the departmental mode to be more responsive to political will and therefore turn to it when they anticipate having to make constant marginal adjustments in regulatory policy, or even when the main policy objectives for regulation have been settled but the costs to be incurred in making sure regulatory officials maximize the appropriate objectives are calculated to be low relative to the agency mode.

Despite inroads, existing literature on regulation and policy instruments raises many more questions about the choice of mode for regulation than it answers. Decades of research on regulatory agencies cannot tell us a lot about which kinds of ideas carried the day in the creation of particular agencies, nor about the circumstances in which administrative principles or strategic rationales can be expected to prevail in a mode choice. The literature linking social and economic regulation and interest politics to the department-agency choice raises at least two questions: whether policy actors from state and society consider organizational design to be an instrument for dampening or at least structuring conflict amongst interests affected by regulation, and whether the type of regulation helps to determine mode choices through its shaping power on the parameters of the policy community.

A major difficulty with instrument choice theory is that the role of non-politicians in the choice process has so far been left unspecified. How are the

interests of organizations and individuals in the private sector or federal and provincial regulatory officials satisfied by agency and department-based modes? What benefits and costs do these political actors see in the full range of organizational options? Even within the political and bureaucrat games, the factors affecting the choice of mode must be clarified. Other factors besides political rationality may be relevant. Cushman's work on the agency problem in the United States, while dated, suggests several candidates: the general prestige of potential recipients of regulatory responsibility and their records of sound regulatory administration, the personnel and other resources available to administer regulatory programmes and partisan politics.²⁰

The problematic role of technical efficiency in the instrument choice literature illustrates many of the questions which need to be answered about choosing modes for regulation. Technical efficiency is assigned decidedly secondary importance by scholars such as Trebilcock et al. In the choice calculus of some political actors, however, this may not necessarily hold true. Interests concerned with improving the efficiency and effectiveness of regulatory decision-making may, in fact, put a premium on technical efficiency over political rationality. Further, it is possible to imagine scenarios where the organizational requirements for technical efficiency coincide with those for political rationality in the eyes of those participating in the choice process. This may be the verdict, for instance, when restraint/downsizing is a key government priority. Instrument choice theory assumes that outcomes vis-a-vis policy instruments

²⁰ Cushman, "The Problem of the Independent Regulatory Commission".

depend not only upon the specific politics of the choice process, but also upon the dominant rationale for choice. For this reason, a model of the emergence of organizational arrangements for regulation must ideally leave room for both kinds of choice criteria, political rationality broadly understood and technical efficiency, as well as for a full range of policy actors who may see political rationality and technical efficiency through different lenses.

2.0 EXPLAINING THE CHOICE OF MODE FOR REGULATION: INTERESTS, IDEAS AND DECISION STYLES

The shortage of scholarship directly bearing on the dissertation's two central research questions justifies - and necessitates - the complementary use of a top-down approach to theory-building. This section argues that concepts, themes and analytic approaches from the literature on policy communities and government (re)organization make several key contributions to developing a theoretical perspective for unravelling the mode puzzle. Policy community- and government (re)organization-inspired explanatory frameworks provide the foundation for relatively comprehensive interpretations of the choice of mode for regulation. Both integrate the shaping power of interests, ideas and decision styles over mode choices.

2.1 The Policy Community Perspective

The policy community literature paints a distinctive picture of the policy process.²¹ Unlike earlier policy studies focussing on the legal and constitutional aspects of policy-making or premised on a rational or stages model of the policy process, the basic units of analysis for students of policy communities are highly differentiated policy sub-systems operating beyond the limits of the formal policy-making process. Government is not a unitary actor at the centre of the process. Nor are organized interests in society assumed to dictate policy. Instead, policy is the product of multiple exchange relationships between all kinds of political actors working toward different goals with different resources, yet with common interests in an area of public policy. The basic claim of the policy community literature is that specific outcomes in a policy domain can be explained by reference to the contours of the resulting sub-system, the distribution of power and influence of individuals, groups and formal organizations from both state and society who are members of the policy community. The institutional framework within which interests interact is considered a major determinant of political power in the policy community and, hence, of policy outcomes. Bosso and Nownes' studies of pesticide regulation in the United States,

²¹ The development of the policy community concept has recently been assessed in several places. See H. Brinton Milward and Gary L. Wamsley, "Policy Subsystems, Networks and the Tools of Public Management," in Robert Eystone, ed. Public Policy Formation (Greenwich, CT: Jai Press, 1984); Grant Jordan, "Sub-Governments, Policy Communities and Networks: Refilling Old Bottles?" J. of Theoretical Politics, 2:3 (1990), pp. 319-338; and Grant Jordan, "Policy Community Realism Versus 'New' Institutionalism Ambiguity," Political Studies, XXXVIII (1990), pp. 470-484.

discussed earlier (see Section 1.1), are sympathetic to this perspective on the policy process.

The favourite level of analysis for students of policy communities is the meso or sectoral.²² Much less orthodox is scholarship using the policy community concept as a basis for analyzing relatively specific policy outcomes. Flexibility, however, is a recognized strength of the concept. If policy communities are to play a critical role in multi-level models of the policy process, as Atkinson and Coleman urge,²³ the level of analysis must be shifted not only up to macro variables, but also down to individual decisions.

This study is an example of the latter approach. The basic proposition is that decisions about the choice of mode for regulation are outcomes that result from processes amongst policy actors from state and society who have a continuing stake in, and knowledge of, regulation. These policy actors are considered to be members of a regulatory policy community. The relative status of community members - that

²² Two good examples of the sectoral orientation are: Michael M. Atkinson and William D. Coleman, The State, Business, and Industrial Change in Canada (Toronto: University of Toronto Press, 1989), an explanation of Canada's reactive industrial policy; and Martin J. Smith, "Changing Agendas and Policy Communities: Agricultural Issues in the 1930s and the 1980s," Public Administration, 67 (summer 1989), pp. 149-165, a cross-time comparison of food and agricultural policy in Britain.

²³ Michael M. Atkinson and William D. Coleman, "Policy Networks, Policy Communities and the Problems of Governance," Governance, 5:2 (April 1992), pp. 154-180.

is, their ability to shape and influence the choice of mode - may vary over time. As we shall see later in Chapters 4 and 5, the pesticide registration review did indeed take place within a distinctive pesticide policy community. The policy community approach instructs us to look to the operation of this policy community for an account of the 1989-90 and 1991-92 decisions about the mode for regulation.

One of the principal difficulties with policy community analysis is ambiguity about the factors affecting policy outcomes. Regardless of the level of the policy process examined, students of policy communities have been far more successful at mapping configurations of interests in specific policy areas than they have been at explaining and predicting policy outcomes. Consider one of the best known taxonomies in the literature. Coleman and Skogstad claim that there are three basic patterns of policy-making: pluralist, closed and state-directed.²⁴ These policy settings are said to involve different structural properties. The key variables, it is asserted, are the state's degree of autonomy in relation to societal actors, the state's coordinating capacity and the level of organizational development of non-state interests. Coleman and Skogstad's approach suggests a way to map a policy community involved in choosing a mode for regulation and to compare it with other policy communities. It does not, however, equip us with the ability to predict

²⁴ William D. Coleman and Grace Skogstad, "Policy Communities and Policy Networks: A Structural Approach," in Coleman and Skogstad, eds. Policy Communities and Public Policy in Canada: A Structural Approach (Mississauga: Copp Clark Pitman, 1990), pp. 14-33.

resolutions of the mode issue given the existence of a particular type of policy community.

The missing link, then, in the policy community literature is the "often undeveloped" connection between policy communities and process and outcome variables.²⁵ Injecting policy community analysis with ideational variables has been recommended as a way to surmount this predicament. This is consistent with one of the leading developments in policy studies over the past decade, the rediscovery of a tradition that sees public policy (at least in part) as intellectual problem-solving.

Several scholars at the forefront of policy community analysis propose that the conceptual and theoretical foundations of their work can be strengthened by reference to the role of ideas in public policy. The latest proponent of this position is Lindquist. Inspired by the pioneering work of Sabatier and Jenkins-Smith, Lindquist argues that our understanding of the dynamics of policy communities can be greatly enriched by taking into account "the ideas, values, and beliefs that circulate within a policy community."²⁶ Lindquist sees two methodologies in the literature for making sense

²⁵ Atkinson and Coleman, "Policy Networks, Policy Communities and the Problems of Governance", p. 161.

²⁶ Evert A. Lindquist, "Public Managers and Policy Communities: Learning to Meet New Challenges," *CPA*, 35:2 (summer 1992), pp. 127-159, at p. 133. See also Paul A. Sabatier, "Knowledge, Policy-Oriented Learning, and Policy Change," *Knowledge*, 8:4 (June 1987), pp. 649-692; and H.C. Jenkins-Smith, *Democratic Politics and Policy Analysis* (Pacific Grove, CA: Brooks/Cole, 1990).

of policy communities, the structuralist approach (which he associates with Atkinson and Coleman [1989] and Coleman and Skogstad) and the learning perspective (which adds a new level of analysis, policy actors' beliefs, premises and values). He writes:

Both approaches have important insights for officials and observers, but each is woefully incomplete without the other. On the one hand, ideas do not circulate freely; structures are repositories and shapers of values through which all policy debates are channelled. On the other hand, structures are not impervious bulwarks against ideas and changing beliefs, particularly when we know that actors within state and societal organizations are often divided on issues, and that individuals move regularly within sub-governments and the attentive publics of policy communities, bringing new ideas and perspectives from organization to organization.²⁷

If three variables - interests, structures and ideas - are to be incorporated into a framework for explaining outcomes of the policy process, the question is: how? One approach is to recast the policy community concept by changing the focal point of analysis from formal institutions to coalitions of interests with common belief systems, as Sabatier does in his "advocacy coalition" framework.²⁸ Alternatively, ideas can be woven directly into the fabric of the policy community.

²⁷ Lindquist, "Public Managers and Policy Communities", p. 133.

²⁸ See Sabatier, "Knowledge, Policy-Oriented Learning, and Policy Change".

The latter strategy is adopted by Hoberg in his concept of a "regulatory regime".²⁹ A regulatory regime consists of eight highly interdependent elements: policy objectives, policy instruments, government institutions, decision-making procedures, government officials, the interest group environment, the knowledge base and supporting norms. Policy change, in Hoberg's model, requires these elements to be reconfigured.

Coincidentally, Hoberg has used the regulatory regime concept to evaluate developments in pesticide regulation in the United States.³⁰ In Hoberg's analysis, the transformation sought by the Reagan administration in the area of pesticide regulation was unsuccessful for two reasons: the presidency controlled only a subset of the regulatory regime's core elements, and the legitimizing needs of a radically new approach to pesticide regulation were underestimated. Like Bosso and Nownes, Hoberg claims that group politics in the pesticide subsystem was a factor in why regulatory change was so limited under Reagan. The strength of his analysis, however, is to show that other elements in his expanded understanding of the pesticide policy community contributed as well to this outcome.

²⁹ See George Hoberg, Jr., "Reaganism, Pluralism, and the Politics of Pesticide Regulation," Policy Studies, 23 (1990), pp. 257-289, as well as George Hoberg, Jr., Pluralism by Design: Environmental Policy and the American Regulatory State (New York: Praeger, 1992).

³⁰ Hoberg, "Reaganism, Pluralism, and the Politics of Pesticide Regulation".

Hoberg's approach to explaining regulatory outcomes is a significant advance in synthesizing insights from contending schools of policy analysis, and a major step toward cumulative knowledge. Hoberg claims that the regulatory regime concept gives greater precision to the terms: "subgovernment", "policy subsystem" and "issue network". Arguably, however, it takes the policy community concept in a fresh direction, depicting it as more multi-dimensional than conventionally understood in the literature. Idea-based variables sit alongside institutional and group politics ones. Accordingly, the regulatory regime concept generates neither the essentially pluralist perspectives of Bosso and Nownes, nor the structural ones advocated by Atkinson, Coleman and Skogstad.

Hoberg's concept has the added benefit of being adaptable to other levels of analysis when appropriate adjustments are made. Compare the variables necessary to account for broad changes in regulatory policy over several years (Hoberg's purpose) versus decisions about the mode for regulation. In the latter case, commonsense alone tells us that qualitatively different sets of ideas that influence policy-making - such as specific policy objectives - are relevant.

Finally, Hoberg's regulatory regime has a special methodological advantage when knowledge about the research topic is limited, as is true for the dissertation. The regime framework has the conceptual categories required for organizing data and developing hypotheses about the questions under investigation. At the same time, its

categories are sufficiently broad to minimize the loss of information that, in retrospect, might prove instructive.

2.2 The Government (Re)Organization Perspective

The literature on government (re)organization and administrative reform makes an equally important contribution to the general strategy the dissertation proposes for illuminating the choice of mode for regulation. One stream of this literature is concerned with alternative modes or institutional arrangements for public administration. The typical approach is represented by Kernaghan and Siegel's basic text on public administration in Canada which asserts several forms of government organization (government departments and central agencies, Crown corporations, regulatory agencies, Royal commissions and task forces) and then outlines the structural characteristics and rationales associated with each in turn.³¹ This kind of literature - highly descriptive and with a strong formal, often legal tone - has an impressive tradition in Canadian public administration.³² It is most helpful for the

³¹ Kenneth Kernaghan and David Siegel, Public Administration in Canada, 2nd ed. (Scarborough: Nelson Canada, 1991). See Part III: The Choice of Organizational Form, pp. 159-271.

³² The outstanding example is J.E. Hodgetts, The Canadian Public Service: A Physiology of Government 1867-1970 (Toronto: University of Toronto Press, 1973). See also J.R. Mallory, The Structure of Canadian Government, rev. ed. (Toronto: Gage, 1984), Chapter 4 on "The Administrative Machine", especially pp. 139-146.

present purposes, however, for facilitating discussion about the nature of the dependent variable (see Chapter 3).

A second stream of the literature on government (re)organization assists in developing a general perspective on the process of choosing modes for regulation. This literature offers two schools of thought about reorganizing the state's administrative machinery. Each relies on a distinctive set of explanatory variables.

The "administrative theory" model characterizes the choice of mode for public administration as a rational, planned process of designing administrative structures and procedures that allow public policies and programmes to be implemented efficiently and effectively. Fundamental principles of organization - concerning, for example, unity of command, the span of control, clear lines of authority and responsibility and leadership - constitute the basis for choice. This first model stresses that the administrative machinery is a neutral instrument of public policy.³³

The "politics" model, on the other hand, is premised on the idea that the (re)organization of government is a political process. This model conceptualizes the

³³ For examples of the administrative theory model in operation see: Machinery of Government Committee, Ministry of Reconstruction, Report (London: MHSO, 1918, reprinted 1957), which is better known as the Haldane Report; and Luther Gulick, "Notes on the Theory of Organization," in Gulick and L. Urwick, eds. Papers on the Science of Administration (New York: Institute of Public Administration, 1937), pp. 1-45, one of the products of the 1937 U.S. President's Committee on Administrative Management (the Brownlow Commission).

choice of organizational arrangement as a political struggle amongst contending interests. It is often emphasized that shaping power over the mode choice comes from both state and society. Chapman and Greenaway, for instance, contend that:

The political dimension to administrative reform [...] must necessarily be wide. It must include "inside" politics as well as political pressures from "outside" governmental circles. Moreover, any change or reform in the administrative system will contain various political pressures which will be closely intermeshed. Analysis of pressure from any particular source on its own may easily distort the overall picture. There is a danger of tearing apart a seamless garment: what matters is often the interconnection of the various threads.³⁴

Brown makes the additional observation that the mode for public administration "reflect[s] broad political choices about the kind of society we want to live in, and cannot be resolved by an 'impartial' enquiry."³⁵

The most satisfying studies of government (re)organization draw on both the administrative theory model and the politics model, thereby analyzing both the administrative and political dimensions of administrative reform.³⁶ A key theme in this body of research is that reorganization has a chameleon-like quality. The official

³⁴ Richard A. Chapman and J.R. Greenaway, The Dynamics of Administrative Reform (London: Croom Helm, 1980), pp. 200-201.

³⁵ R.G.S. Brown, The Administrative Process in Britain (London: Methuen, 1970), at pp. 194-195.

³⁶ See, e.g., R.G.S. Brown and D.R. Steel, The Administrative Process in Britain, 2nd ed. (London: Methuen, 1979); Chapman and Greenaway, The Dynamics of Administrative Reform; and James G. March and Johan P. Olsen, "Organizing Political Life: What Administrative Reorganization Tells Us About Government," APSR, 77:2 (June 1983), pp. 281-296.

basis for choosing a particular organizational arrangement frequently conflicts with - or at least masks - the underlying "positional politics".³⁷ There are also national styles of administrative reform. According to Arnold, for example, reorganization follows different patterns in Britain (a covert political process that is "part of the private world of British Cabinet politics") and the United States (where reorganization tends to be a more open process in which administrative rationality is often influential).³⁸ The claim is that the means and justifications for administrative reform are affected by "the array of fundamental authority" in the political regime.³⁹

March and Olsen's garbage can stands out as one of the few attempts at theoretically-driven analysis in the government (re)organization literature. The garbage can model explains reorganization as "a choice opportunity that collects an assortment of loosely-connected problems, solutions, and participants."⁴⁰ March and Olsen argue that the interaction of problems, solutions and participants is determined

³⁷ "Positional politics" refers to actions taken by political actors "related not so much to securing (at least in the short run) an allocation of desired values but rather the attainment of desired positions vis-a-vis other individuals or groups. What is sought is a share of the coercive abilities of the government." See Peter Aucoin, "Theory and Research in the Study of Policy-Making," in G. Bruce Doern and Peter Aucoin, eds. The Structures of Policy-Making in Canada (Toronto: Macmillan, 1971), pp. 10-38, at p. 25. On the more general point see March and Olsen, "Organizing Political Life".

³⁸ Peri E. Arnold, "Reorganization and Regime in the United States and Britain," PAR, 48:3 (May/June 1988), pp. 726-734, at p. 731.

³⁹ Ibid., p. 732.

⁴⁰ Johan P. Olsen, "Reorganization as a Garbage Can," in James G. March and Johan P. Olsen, Ambiguity and Choice in Organizations (Bergen: Universitetsforlaget, 1976), pp. 314-337, at p. 314. See also March and Olsen, "Organizing Political Life".

by factors such as the attention span of major political actors, ambiguity in the definition of policy problems and their solutions, as well as the specific reform proposals available at any particular point in time. Administrative theory is relevant only in the sense that it is a political instrument of the first order: it is wielded by participants in the choice process for political purposes. The final choice of organizational arrangement in the garbage can model is not necessarily an optimal one. Nor is it necessarily one expected by participants, or one that might be predicted from the objectives established at the outset of the process.

The strength of March and Olsen's perspective lies in its rejection of rational policy- and decision-making. The garbage can paints a picture of a choice process that is complex, random and riddled with ambiguity. By many accounts this accurately describes the policy-making process⁴¹ as well as decision-making in organizations.⁴² The garbage can's emphasis on non-rationality echoes one of the leading themes in the policy community literature.

Using the garbage can concept to explain the type of choice of interest in the dissertation is untrodden territory. The dependent variable in March and Olsen's

⁴¹ One of the best applications of the garbage can to policy-making is Kingdon, Agendas, Alternatives, and Public Policies.

⁴² For a discussion of the garbage can model as a theory of organizational decision-making see Harold F. Gortner, Julianne Mahler and Jeanne Bell Nicholson, Organization Theory: A Public Perspective (Chicago: Dorsey Press, 1987), pp. 263-271.

work, as in virtually all scholarship on government reorganization,⁴³ is the macro-structure of government.⁴⁴ In the case of the dissertation, the concern is with shedding light on decisions about the administrative machinery for regulating in specific areas (such as pesticides). Adjusting the focus of analysis to this small chunk of the reorganization question is in some respects a return to the garbage can's original decision-making orientation. What is different is the context for decision - not a formal organization, but a community of political actors.

Contemporary policy theory's rediscovery of political institutions suggests another avenue for improving the garbage can perspective on the choice of mode for regulation.⁴⁵ The neo-institutionalist literature maintains that political institutions do not simply reflect power relations in society, but instead exert an independent influence on the distribution of power in policy communities and therefore on policy- and decision-making. Although this literature is neither coherent nor consistent, there is considerable agreement on why the institutional framework, however it is

⁴³ An exception is George C.S. Benson, "Internal Administrative Organization," *PAR*, 1:5 (autumn 1941), pp. 472-484.

⁴⁴ That is, the overall (re)distribution of functions amongst parts of the administrative machine.

⁴⁵ A good reference on the development of the new institutionalism in general is James G. March and Johan P. Olsen, Rediscovering Institutions: The Organizational Basis of Political Life (New York: Free Press, 1989).

understood,⁴⁶ is an important influence on public policy: it structures political reality, defines the terms and nature of political discourse and shapes the preferences, strategies and resources of policy actors and their abilities to embody their preferences in public policy. The potential explanatory power of institutional variables is neglected in the current garbage can interpretation of government (re)organization.

The idea of incorporating institutional variables such as the rules and practices for decision-making into a participants/problems and solutions-based perspective on the choice of mode for regulation has precedent in a number of highly successful accounts of regulatory outcomes that embrace neo-institutionalist thinking. Although separated by close to a decade, studies by Ackerman and Hassler, Schrecker, Trebilcock et al., Forbes and Lee and Hoberg attest to the range of institutional factors that are properly incorporated into theories of regulation.⁴⁷ Taken together,

⁴⁶ The wide range of meanings assigned to the term "political institution" is discussed in Jordan, "Policy Community Realism Versus 'New' Institutional Ambiguity". Jordan observes at p. 478 that: "The new popularity of the term 'institution' is [...] not producing a cumulatively valuable literature but a growing confusion caused by lack of consistency in the language." Scharpf points to another problem, the highly contingent nature of the postulated relationship between political institutions and policy choices. See Fritz W. Scharpf, "Decision Rules, Decision Styles and Policy Choices," *J. of Theoretical Politics*, 1:2 (1989), pp. 149-176 for an elaboration of the latter argument.

⁴⁷ Ackerman and Hassler's Clean Coal/Dirty Air, a study of 1976-77 revisions to the U.S. Clean Air Act, attributes stakeholders' strategic activities to the institutional design initially adopted for regulation in 1970. Schrecker makes the related argument that "the mobilization of bias" in Canadian environmental regulation affects assessments of regulatory acceptability, for instance by determining how scientific evidence and risk-benefit analyses are treated. See Ted Schrecker, "The Mobilization of Bias in Closed Systems: Environmental Regulation in Canada," *J. of Business Administration*, 15 (1984), pp. 43-63. Trebilcock et al.'s The Choice of Governing Instrument posits that the rules

these studies have a simple message for the garbage can. First, that the interplay of participants with problems and solutions does not transpire in a vacuum. And second, that the institutional framework within which interplay takes place is a third factor in the (re)organization of government. This, in turn, implies a three-part explanation of the choice of mode for regulation.

A final adjustment must be made in the garbage can model. March and Olsen are silent about the bounds of the choice process. This is clearly consistent with their theme of ambiguity. However, identifying who the participants in the choice process are is essential if we want to operationalize the garbage can in the context of choosing modes for regulation. One technique is to draw again on the concept of policy community. As discussed earlier, policy community analysis is a theoretically useful device for mapping the terrain of political actors involved, to different degrees, in making choices about the mode for regulation.

organizing the political, bureaucratic and interest group games underlying the policy process are important determinants of the choice of policy instrument because they influence the type and quantity of information available to policy-makers. The claim from Forbes and Lee is that membership, structures and rules of procedure affect regulatory agency decision-making in Canada. See J.D. Forbes and Colleen A. Lee, "The Effects of Structures, Rules and Procedures on the Decisions of Administrative Agencies: A Comparative Analysis," Faculty of Commerce and Business Administration, University of British Columbia, Vancouver, September 1990. Hoberg's regulatory regime concept, discussed earlier in the chapter, is a key contribution to systematically integrating several types of institutional variables into theories of regulation.

3.0 SUMMARY

This chapter identified and discussed the basic building blocks for the dissertation's theoretical perspective on choosing modes for regulation. Section 1.0 canvassed existing literature. Section 1.1. examined general approaches in the comparative literature on regulation to explaining regulatory outcomes. Recent scholarship using the concept of policy community was singled out as an important advance in the development of the study of regulation. Section 1.2 stressed the strengths of the theory of instrument choice as a basis for explaining the organizational arrangement adopted for regulation. It also, however, pointed to a number of ambiguities, questions and assumptions that must be prodded in modifying the theory to account for choices about the machinery for government regulation.

The purpose in Section 2.0 was to establish that the basic building blocks of the dissertation's framework - interests, ideas and decision styles - are plausible explanatory variables. Support was found initially in the literature on policy communities. The policy community perspective bounds the choice process. It stresses the diversity of interests who, by wielding resources, have shaping power over the mode for regulation and also the importance of the institutional framework within which interests act. The case for incorporating ideas as a third class of variables in policy community analysis was discussed.

Scholarship on government (re)organization grounds a complementary perspective. As shown in Section 2.2, it is useful to distinguish the administrative theory and politics models of choosing modes for public administration. March and Olsen's garbage can expands on both in adopting a non-rational depiction of policy- and decision-making. The key weakness in the problems and solutions/participants framework is the failure to take into account the lessons of neo-institutional thinking.

In short, neither policy community theory nor the literature on government (re)organization alone gives a completely satisfactory explanation of mode choices. Mode choices are simultaneously influenced by at least three sets of factors, interests, ideas and the rules and procedures or style for decision-making. These variables, in turn, together constitute the basic building blocks for the dissertation's perspective on choosing modes for regulation.

Chapter 3

EXPLAINING THE CHOICE OF MODE FOR REGULATION: THE THEORETICAL PERSPECTIVE

With the basic building blocks now in place, we move to elaborating the dissertation's theoretical perspective on the choice of mode for regulation. This chapter provides definitions and discussion. The objective is to develop and refine the dissertation's central proposition that the choice of mode for regulation is the result of interplay amongst interest politics, mode paradigms and the rules and procedures or style for decision-making.

Section 1.0 deals with the dissertation's dependent variable, the mode for regulation. A unique concept of a mode for regulation is developed. Sections 1.1 and 1.2 explore this concept through a discussion of the notion of tractability and selected factors that affect it, as well as of reforming modes for regulation.

The remainder of the chapter develops the three independent variables in the dissertation's explanatory framework. Section 2.0 is concerned with interest politics, especially the manner in which policy community members' resources, strategic activities and respective status as 'insiders' and 'outsiders' in the choice process influence the mode outcome. Section 3.0 develops the concept of mode paradigms.

Finally, Section 4.0 explores decision styles and their effects on the policy community's choice of mode for regulation.

1.0 THE MODE FOR REGULATION

Here, we examine the dissertation's dependent variable. The section starts by developing a unique concept of modes for regulation that both departs from and enriches traditional approaches. A fuller understanding of the concept used in the dissertation is achieved through consideration of two issues: tractability (in Section 1.1) and the dynamics of reform (in Section 1.2).

The mode for regulation is the organizational arrangement in place for government regulation. As part of the machinery of government, the mode is comprised of three elements: structure, resources and processes. Structure refers to the formal or legal locus of responsibility for regulation, as well as the regulatory system's statutory mandate. Resources are the things the regulatory authority has and does not have to achieve its mandate and objectives. Two of the most important are a budget and qualified personnel. The third element of any mode for regulation comprises the processes by which the regulator makes decisions and relates to other political actors with roles in regulatory decision-making. Each of these three elements

is a dimension of the administrative machinery for regulation, or how the regulatory system regulates.

It follows that modes for regulation are not all alike. Modes differ in their mix of structure, resources and processes. The customary approach in the regulatory literature is to distinguish modes on the basis of structure alone (i.e., as described in Section 1.1 of Chapter 1, a ministerial department, an arm's-length agency or self-regulation). When modes are mixes of structure, resources and processes, however, the trichotomy falters. There are instead infinite options under the broad umbrella of any one of the traditional mode categories; for instance, agency modes with different resources and different processes, and departmental modes headed by different ministers with different resources and different processes. Seeing the typology of modes in this way preserves a distinction that is analytically significant in a parliamentary system of government, but at the same time subtly highlights variety in the administrative machinery for government regulation.

Take the case of pesticide registration. The mode in place on the eve of the pesticide registration review was a Minister of Agriculture-headed departmental arrangement. The most plausible or obvious structural reforms included moving regulatory responsibility to an independent regulatory agency, or transferring it to another minister and department. But there were others. Even if responsibility for the registration system continued to reside in its current home, the administrative

machine could be adjusted in terms of funding and personnel resources, and also in terms of how other departments assisted the Minister of Agriculture in making registration decisions.

Diversity in modes for regulation is the message implied by the literature on government (re)organization. Macro-level studies concentrate on the structural differences between independent regulatory agencies and executive departments of government. Szanton and others,¹ however, recognize that there is more to the machinery of government than formal structure. Look beneath the veneer: tasks can be grouped together in different ways; some organizations have more tiers and/or more internal units than others; personnel and dollar resource levels vary; and there are countless patterns of administrative relations between units of government designed to facilitate communication and ensure effective action. Such variation in structure, resources and processes is equally applicable to modes for regulation.

1.1 The Concept of Tractability

The dissertation's concept of modes for regulation opens the door to examining the relationships between the three constituent elements. The idea that members of a

¹ See Szanton, "So You Want to Reorganize the Government?", as well as the discussion and analysis in Chapter 2, Section 2.2.

policy community have access to three alternative levers that can be deployed in designing a mode for regulation seems uncontroversial. It is similarly reasonable to hypothesize that structure, resources and processes are in some measure substitutable.

Tractability refers to the ease with which structure, resources and processes can be moulded into modes for regulation. The concept is useful as a gauge of how substitutable the three mode elements actually are at any point in time. Tractability affects what mode alternatives are available for the policy community to choose from or, put another way, the possible combinations of structure, resources and processes.

The three mode elements are certainly not equally tractable. There are important differences in terms of:

- . whether the element's addition to the mode mix can be authorized by statute, regulation, inter-departmental agreement or other means;
- . the policy processes with which each is associated;
- . the sources from which approval must be gained for the element to be added to the mode mix;
- . the intensity of opposition generated by the element's potential use;
- . the opposition's access to key decision points in the approval process; and
- . the pertinent normative considerations.

Seen in this light, each mode element has distinctive baggage, with both constant and transitory dimensions. The baggage is a factor in the element's tractability. It can constrain the element's availability or push it, in an absolute sense and/or a practical one. The baggage accordingly has implications for the mix of structure, resources and processes settled on for regulation.

For the purposes of fleshing out this multi-layered concept of modes for regulation, it is helpful to examine several tractability-related factors in greater detail. Four are singled out: the theory of ministerial responsibility and the ministerial department; executive control over the machinery of government; political priorities; and what Gulick calls "the bleeding factor"². The focus is on effects for the relative ease of crafting structure, resources and processes into organizational arrangements for regulation.

1.1.1 Ministerial Responsibility and the Ministerial Department

Canada's system of parliamentary government adds a unique dimension to the tractability of different modes for regulation. Consider that one of the logical consequences of the principle of ministerial responsibility was the development, in

² Gulick, "Notes on the Theory of Organization", p. 5.

19th century Britain, of the ministerial department form of government organization.³ The ministerial department had several distinguishing features: it was headed by a single elected person, who was responsible to Parliament for all departmental activities; a permanent (or deputy) head acted as both chief adviser to the minister and general manager of the department; and a supporting hierarchy of public servants carried out the department's day-to-day administrative functions. As Schaffer explains, the emerging consensus was that ministerial responsibility "demanded departmental organisation of this and only of this type, and that ministerial responsibility and departmental organisation should be applied throughout central government."⁴

The ministerial department is the standard way of compartmentalizing government programmes in Canada.⁵ The departmental arrangement is considered ideal for meeting the needs of government in a parliamentary democracy because it focusses ministerial responsibility. This rationale is in keeping with the model's intellectual roots in British political thought. But, as the Glassco Royal Commission on Government Organization reported in 1962, the departmental form is defended for

³ For a detailed examination of this issue see B.B. Schaffer, "The Idea of the Ministerial Department: Bentham, Mill and Bagehot," Australian J. of Politics and History, (1957), 3:1, pp. 60-78; and R.L. Wettenhall, "The Ministerial Department: British Origins and Australian Adaptations," Public Administration, 23:3 (Sept. 1973), pp. 233-250.

⁴ Schaffer, "The Idea of the Ministerial Department", p. 61 (reference omitted).

⁵ Hodgetts, The Canadian Public Service, p. 88.

other reasons as well. It is, for example, "adaptable to almost any conceivable purpose and [is] unequalled in its sensitivity to public wants".⁶ The end result is that the weight of convention strongly favours the ministerial department as the basis for organizing the machinery of Canadian government.

Ministerial responsibility and its logical extension, the ministerial department, together constitute a powerful normative constraint on the modes available to the policy community. They render structure perhaps the least manipulable of all the mode elements. There are clearly well-known instances where deviations from the normal practice of regulation by minister/department have occurred. Deeply embedded in the process of designing regulatory regimes, however, is a natural tendency to reach for single minister-based modes first. Less conventional modes are chosen only when this force is successfully counteracted. The pesticide registration review demonstrates that, the more radical the proposal (e.g. joint ministerial responsibility), the more obstacles thrown in its path and the less likely it is therefore to be chosen by the policy community.

⁶ Canada. Royal Commission on Government Organization. The Organization of the Government of Canada, vol. 5 (Ottawa: Queen's Printer, 1963), p. 54.

1.1.2 The Preeminence of the Executive

The deployability of mode elements is affected by a second regime-related factor, the executive's virtual carte blanche over reform of the machinery for government administration. The initiation of administrative (re)organization at the federal level in Canada has tended to be the prerogative of Cabinet and, since the 1960s, usually the prime minister. Hodgetts explains that this is because Parliament is remote from the operational levels of government administration and is relatively unconcerned with the details. Those who work within the machinery, on the other hand, are familiar with its strengths and limitations and have relatively direct access to ministers. Parliament's involvement in (re)organization is generally restricted,⁷ according to Hodgetts, to ex post facto approval of statutes that create and outline the functions of government departments (e.g. Department of Agriculture Act⁸) and agencies (e.g. Canadian Radio-television and Telecommunications Act⁹), or assign legal authority for specific programmes to ministers/departments (e.g. Pest Control Products Act¹⁰). The executive can avoid even this parliamentary scrutiny by

⁷ The exception is a constitutional one. As Hodgetts points out, Parliament formally retains the right to reject any executive-proposed (re)organization plan by withholding supply (i.e. refusing to grant the necessary funds). See Hodgetts, The Canadian Public Service, p. 66.

⁸ R.S.C. 1985, c. A-9.

⁹ R.S.C. 1985, c. C-22.

¹⁰ R.S.C. 1985, c. P-9.

(re)organizing through orders-in-council under the Public Service Rearrangement and Transfer of Duties Act.¹¹

Executive preeminence applies in the main to the form of administrative entities. The executive also, however, has critical influence over the allocation of resources amongst departments and agencies and amongst programmes through the expenditure process. The central point of coordination for this process has historically been the Treasury Board. Since the 1980s, two other Cabinet committees - Priorities and Planning and Expenditure Review - have shared the burden of managing government spending.

Theorizing about the effects of executive dominance on tractability is seriously hindered by the traditional shroud of secrecy around administrative reform and Cabinet operations. The hypothesis here is that the executive's privileged position reinforces the narrowing of structural options started by the departmental norm. The political actors with leverage over the structural component of modes for regulation are undoubtedly the prime minister, key members of the Cabinet (especially the ministers who stand to win and lose when regulatory responsibility is distributed) and

¹¹ R.S.C. 1985, c. P-34. The PSRTDA authorizes the Governor-in-Council to transfer any powers, duties or functions or the control or supervision of any part of the public service from one minister to another, from one department to another, or from one portion of the public service to another; and to amalgamate or combine two or more departments under one minister. Since 1950, the Governor-in-Council does not have to table PSRTDA orders in Parliament. See Regulations Act, 1950, c. 50, s. 10.

senior bureaucrats in the affected areas of government. The quasi-sacred status of the departmental form of government organization is bound to seep into their decision-making about modes for regulation for at least two reasons.

The ministerial department is the linchpin of the core ideas relating to institutional design in Canada. The executive and its bureaucratic advisors merely give expression to or are repositories for what Atkinson and Coleman have lately characterized as the "dominant organizational mythology".¹² The PRR case study (see Chapters 6 and 7) shows that this normative constraint is manifested in choosing modes for regulation through mode paradigms as well as through shifting interest coalitions in the policy community.

The role of habit or custom in the choice of mode for regulation must not be under-estimated. The ministerial department is the organizational arrangement most familiar to the executive-anchored sub-set of the policy community and, not incidentally, one which it has a vested interest in defending. The proposition, then, is that the practice of reaching for departments first is a further constraint on the malleability of structure in the policy community's choice of mode for regulation.

¹² William Coleman and Michael Atkinson, "Obstacles to Organizational Change: The Creation of the Canadian Space Agency," *CPA*, 36:2 (summer 1993), pp. 129-152, see especially pp. 147-148.

The preceding discussion implies that structure is a comparatively intransigent element in modes for regulation. It must nevertheless always be kept in mind that the toolkit of structural arrangements for delivering government regulation is full of alternatives. Strictly speaking, there is nothing automatic at all about executive muscle being exerted behind department-based modes for regulation.

A sound theoretical perspective on choosing modes for regulation must accordingly incorporate the premise that, at least in principle, structure has the potential to be highly flexible. The crucial issue is: in what circumstances? The case study analysis in Chapters 6 and 7 provides a number of clues about the factors that affect the likelihood of mode choices extending to structural reform.

Nor can sound theorizing ignore the fact that executive influence varies across mode elements. Executive influence is noticeably muted when it comes to resources. As the budgeting literature reminds us, the allocation of dollars, person-years and management complements to regulatory systems is conducted within the overall framework of the expenditure process which means that it is pushed and pulled by government-wide bargaining between spenders and guardians over scarce resources.¹³ The implication is that political actors beyond the immediate executive also have a hand on the resource lever in the policy community's mixing of modes for

¹³ See Donald J. Savoie, The Politics of Public Spending in Canada (Toronto: University of Toronto Press, 1990).

regulation. Principal amongst these are likely to be the Treasury Board and the Department of Finance. To anticipate the terminology developed in Section 2.0 below, these political actors compete for "insider" status in the mode choice.

In summary, it is appropriate to be skeptical about the monolithic, extremely powerful "established organizational imprints derived from the Westminster model of parliamentary government" identified by Atkinson and Coleman.¹⁴ The 1988-92 pesticide review casts light on the ways the mythology can be successfully counteracted, or counterbalanced. Most important, the analysis in Chapters 6 and 7 leads to the conclusion that the centres of power and influence vis-a-vis the design of machinery for government regulation are more widely dispersed and also much more variable than the literature generally assumes.

1.1.3 Political Priorities

The political agenda of the government of the day may have implications for moulding mode elements into organizational arrangements. Consider, for example, the Mulroney government's commitment to deregulation, restraint and downsizing and

¹⁴ Coleman and Atkinson, "Obstacles to Organizational Change," p. 131.

reasserting the politics/administration dichotomy.¹⁵ These kinds of priorities put practical constraints on the availability of two mode elements in particular, structure and resources. The creation of a new bureaucracy free to operate at arm's-length from government control would, on its face, be anomalous. So would a huge influx of new funding or expensive regulatory expertise. This is not to suggest that any of these alternatives is absolutely foreclosed. Rather, a political agenda of this flavour increases the relative cost to many policy community members of pulling the structure lever so that it rests at the agency option, or pulling the resources lever to inject additional dollars and person-years.

A closer look at the pesticide review reveals an interesting contradiction. (Re)organization, as it is explained in the literature, is usually a response by government to pressure to assume new responsibilities or to streamline the administrative machine. Moreover, a substantial portion of streamlining-directed reorganization has taken place in the context of governments reducing their degree of intervention in the economy and society. The paradox of the 1988-92 PRR is that the Mulroney government was confronted with a regulatory version of "do more with less". There were simultaneous demands to regulate more (i.e. the health and environmental consequences of pesticide use) and to eliminate overlap and duplication

¹⁵ On the Mulroney agenda see Peter Aucoin, "Contraction, Managerialism and Decentralization in Canadian Government," Governance, 1:2 (April 1988), pp. 144-161; and Peter Aucoin, "The Mulroney Government, 1984-88: Priorities, Positional Policy and Power," in Andrew G. Cairner and Daniel Salee, eds. Canada Under Mulroney: An End-of-Term Report (Montreal: Vehicule Press, 1988), pp. 335-356.

in the registration system. This dynamic's meaning for tractability is uncertain. One hypothesis is that it creates room to manoeuvre around political constraints such as those described above which might otherwise limit structure-based reforms.

1.1.4 The Bleeding Factor

A key quagmire of administrative reform is what Gulick calls "bleeding". As Hodgetts writes:

there are bound to be conflicts of jurisdiction: the search for a 'water-tight' department, completely self-contained, is bound to be frustrated by the ubiquitous connecting tissue that links a programme in one department to those conducted in other departments.¹⁶

A water-tight regulatory system is similarly remote. The pesticide case is again illustrative. Chapter 4 describes a registration system that was formally the exclusive responsibility of the Minister of Agriculture, yet actually implicated up to five other federal ministers and departments in its operation. The "ubiquitous connecting tissue" was partly based on the scarcity of toxicological expertise and the fact that pesticide experts also tended to do regulatory science falling within the mandates of Health and Welfare, say, or Environment Canada. Another consideration was the horizontal and amorphous nature of the pesticide policy area itself.

¹⁶ Hodgetts, The Canadian Public Service, p. 113.

The dilemma bleeding poses for reforming modes for regulation lies in disequilibrating shocks if the regulatory system is extricated. Removing the pesticide registration system from its net of inter-departmental relations and consolidating its appendages is at least analytically a prerequisite to reallocating regulatory responsibility to an independent agency, or another minister. Such structural adjustments are likely to interfere with the priorities of connected departments. They may also force departments to relinquish scarce expertise. Fierce, effective opposition should be anticipated. The corollary is that alternative levers may have greater tractability in deeply embedded regulatory regimes such as the pesticide registration system. Procedure-based changes, for instance, may be achievable without damage to the "ubiquitous connecting tissue".

1.2 The Dynamic of Reform

Reform - moving from one mode to another, or revising an existing mode - adds a special dynamic to mixing modes for regulation. In the modern regulatory state it is impossible to imagine designing a mode for regulation on a blank slate. The normal pattern is for a new mix of structure, resources and processes to replace or to evolve from an already-existing one. Seen in this way, it is not just the tractability of the three mode elements on their own terms that matters. The ability to manipulate

structure, resources and processes in the context of reform cannot avoid being influenced by the presence of a pre-existing organizational arrangement.

A key way this happens is through the power of inertia. There seems to be a natural disinclination amongst people and organizations to take action until the need is uncontested. We are furthermore told that, the farther proposed reforms diverge from the status quo or the riskier they are, the greater the resistance to them and, therefore, the more convincing proponents of change must be. In the case of highly specialized areas of regulation, special anti-change forces may be at play. Many Canadian pesticide regulators, for example, have spent most of their professional lives in the system and consequently feel a sense of individual and collective ownership in it.

A second aspect of the reform dynamic is regularly overlooked in the literature. Remixing modes for regulation shifts political power in the policy community. In the case of structural reform, the creation of winners and losers is pronounced. Reallocating regulatory responsibility depends on having one source relinquish statutory authority (either voluntarily or under duress), and another both willing and able to accept it. The usual assumption is that politicians and bureaucrats are empire-builders who compete to maximize control over government programmes, over budgets and over staff. The empire-building argument denies the possibility of "hot potatoes" which politicians and bureaucrats actually compete to avoid. But as the pesticide registration review case study in Chapter 4 through 7 demonstrates, a

satisfactory explanation of why particular modes for regulation are chosen by the policy community must leave room for this possibility. The lesson from the PRR is that a relinquisher of power is far easier to locate than a recipient when the regulatory area up for grabs is a political minefield.

2.0 INTEREST POLITICS AND THE CHOICE OF MODE FOR REGULATION

Interest politics is the first independent variable in the dissertation's theoretical framework. This section discusses the influence political actors' strategic activities have on the choice of mode for regulation. It is well-established that interests politics matter in the larger universe of regulatory outcomes.¹⁷ Under the precepts of both policy community analysis and the politics model of government (re)organization, the distribution of power amongst various types of interests is a key determinant of the mode outcome, that is the choice of mode for regulation. Countervailing groups of interests in the policy community lie behind the administrative machinery selected for government regulation.

¹⁷ See, e.g., Roger G. Noll and Bruce M. Owen, The Political Economy of Deregulation: Interest Groups in the Regulatory Process (Washington, DC: American Enterprise Institute, 1983).

2.1 The Importance of Resources

At its heart, the choice of mode for regulation is a political struggle amongst contending interests. Members of the policy community, from both state and society, seek to have their own preferences embodied in the chosen mix of structure, resources and processes. Outwardly, at least, these preferences may concern genuine matters of administration and organizational design. Beneath the surface, however, they often reflect political motives, such as gaining access and representation in the regulatory process, reducing the costs of regulation, or ensuring future regulatory decisions are more favourable to policy community members' objectives and needs.

Political actors possess differential abilities to embody their preferences in the policy community's choice of mode. The primary source of influence is the resources brought to bear on the choice process. Many resources are known to have shaping power over policy outcomes in general. Applied to the case of choosing modes for regulation, these include:

- . the authority in law or based on convention to make decisions regarding the mode for regulation;
- . a supportive constituency that can be delivered to those who make authoritative decisions about the mode for regulation;
- . a record of constructive participation in regulatory policy-making in the past;

- . the ability to coordinate activities with like-minded interests; and
- . access to key people and institutions with the authority to support or oppose decisions regarding the mode for regulation.

It is moreover reasonable to hypothesize that there are some resources - such as prestige in the regulatory arena and specialized knowledge and expertise in government organization and regulatory administration - that are of heightened value to political actors seeking to shape the choice of mode for regulation.

2.2 The Concept of Insiders and Outsiders: A State-Directed Policy Community?

Policy communities involved in choosing modes for regulation are segmented into two camps. "Insiders" are the sub-set of political actors who are best able to embody their preferences in the choice of mode for regulation at any particular point in time. The policy community's "outsider" component consists of political actors with comparatively less influence in the choice process. The insider/outsider distinction parallels Pross' effort to distinguish the subgovernment of policy communities from the attentive public.¹⁸ Extending the analogy, outsiders lack the power of insiders but still play a significant role in the mode choice.

¹⁸ A. Paul Pross, Group Politics and Public Policy, 2nd ed. (Toronto: Oxford University Press, 1992), pp. 120-122.

Conventional wisdom has it that there is a sharp, permanent dividing line between insiders and outsiders. The literature characterizes the design of machinery for federal government administration as the private preserve of the prime minister, Cabinet and individual ministers. The bureaucracy is also awarded insider status because of its constitutional role as the executive's advisor and its hands-on experience managing the machinery of government. Private sector interests and non-governmental specialists in organizational design, for their part, are emphatically classed as outsiders.

Whether private sector interests are as peripheral as the (re)organization literature claims is doubtful. The Glassco Royal Commission confirms that in some regards reforming organizational arrangements in Canada is midway between the British case, where it is an exclusively executive process, and the American, where there is a stronger tradition of private sector involvement.

The same applies on the regulatory side. The well-documented phenomenon of regulatory capture exemplifies the influence regulated interests can potentially have over regulatory outcomes. Furthermore, deliberate steps have been taken at the federal level in Canada to give non-governmental interests stronger voices in the regulatory arena. The 1986 Federal Regulatory Policy promised stakeholders "a full opportunity for consultation and participation" in regulatory policy- and decision-

making.¹⁹ The trend has continued in the 1990s with the complementary public service-wide theme of governing through consultation. Enhanced opportunities for participation and consultation certainly do not guarantee influence in the choice of mode for regulation. They do, however, provide the sine qua non of influence, namely access to the decision-makers of government.

A satisfactory theory of the choice of mode for regulation must accordingly be able to handle the possibility that non-governmental members of the policy community are, or can be, insiders. The extent of their leverage over the mixing of structure, resources and processes is an empirical question. The pesticide registration case study in Chapters 4 through 7 indicates that private sector interests do not have an unbridled capacity to counteract executive and bureaucratic preeminence vis-a-vis modes for regulation. The playing field nevertheless appears to be considerably more level between government and non-government interests than conventionally portrayed.

Allowance must also be made in a theory about mode choices for the movement of policy community members from the insider camp to the outsider camp, and vice versa. Interests' status is subject to change in two regards. First, relatively long-term adjustments may take place in the distribution of resources from which power is derived. Arnold's work on government (re)organization in Britain and the

¹⁹ See Privy Council Office, Government of Canada. Regulatory Reform Strategy (Ottawa: Minister of Supply and Services, May 1986).

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United States implies, for example, that the process of choosing modes for regulation is opened up to a wider range of policy community members when the executive's legitimacy and trust in the state as a whole are in decline.²⁰ Similarly, new sensitivity to questions of institutional design may translate into private sector interests challenging for more prominent roles in the choice of mode for regulation.

An important lesson from the PRR is that policy community members can also move from insider to outsider over the course of a single exercise in reforming the mode for regulation. This kind of change results from comparatively transient shifts in the deployability of interests' mode-related resources, or because mode-related resources do not have constant shaping power. As will be explained in Section 4.0, the value of interests' resources vis-a-vis mode outcomes depends on the decision style for mixing structure with resources and processes. The earlier discussion of modes for regulation in Section 1.0 made the further point that the influence of interests and their resources is not uniform across elements in the mode for regulation. Shifts in the insider and outsider communities of interests are at the root of why, within the context of the pesticide registration review, the Review Team and federal government reached divergent decisions regarding the preferred mode for regulation.

²⁰ Arnold, "Reorganization and Regime in the United States and Britain", at pp. 731-732.

Finally, we raise the possibility of a state-directed policy community for mode choices. The approach in the literature on policy communities (reviewed in Chapter 2) is to map out groups of interests in particular policy fields. Here, the proposition is that the relevant unit of analysis is not what is normally considered a substantive field of public policy (e.g. pesticide registration), but instead the field of government administration itself (i.e. the machinery for delivering pesticide registration). Reorienting the policy community concept on this axis may be appropriate if, as the pesticide review case study seems to suggest, the process of designing modes for regulation closely conforms to the model of what Coleman and Skogstad call a state-directed policy community.²¹

Thinking about the choice of mode for regulation through a conceptual lens such as this is highly instructive because it potentially moves analysis beyond the usual narrow, static preoccupation with executive preeminence and the normative principles of organizational design. The relationship between public and private actors in terms of their respective capacity to shape the mode choice becomes the centre of attention. This, as the case study shows, is crucial progress toward improving both our theoretical and empirical knowledge about choosing - and reinventing - the machinery for government regulation. The appropriateness of relying on the concept of a state-

²¹ Coleman and Skogstad, "Policy Communities and Policy Networks: A Structural Approach".

directed policy community to understand mode choices is explored at length in the dissertation's conclusion (see Chapter 8).

2.3 Patterns of Interest Politics and the Nature of Regulation

Our insights into the interconnection of interest politics with the choice of mode for regulation are sharpened by direct reference to scholarship on regulation. A basic assertion in the regulatory literature is that there are two different types of regulation - economic and social - that invoke wholly different policy considerations and wholly different interest groups.²² As often noted, the two types of regulation also tend to coincide with different structural arrangements, an agency in the case of economic regulation and a department in the case of social regulation.²³ The relationships amongst these three variables - the type of regulation, the pattern of interest politics and the choice of structure - have not, however, been clarified.

Of concern here is the proposition that the choice of mode is a function of the influence of the type of regulation on the interest structure of the policy community. Economic regulation affects a restricted number of interests in a single sector, while

²² See Eads and Fix, Relief or Reform: Reagan's Regulatory Dilemma, pp. 12-15; and McGarity, "Regulatory Reform in the Reagan Era," pp. 254-255.

²³ See Doern, "Regulatory Processes and Regulatory Agencies", p. 176.

social regulation cuts across sectors and therefore affects a larger number and wider range of interests. This difference in the direction and scope of coverage is widely considered to make social regulation inherently more conflictual.²⁴ The relatively high level of conflict in social regulation may be reinforced by the recency and contentiousness of government intervention in the area.

If the type of regulation does affect the level of conflict in policy communities, the issue is whether this relationship in turn explains the apparent links between economic regulation and agency-based modes on the one hand, and social regulation and department-based modes on the other. Policy community members may prefer modes based on their perceived capacity to dampen conflict. The significance of whether departmental arrangements are judged better suited to facilitating accommodation and hence are adopted for social regulation is explored below in Section 3.2.

Another possibility is that the level of conflict affects the ability of policy communities to overcome the traditional practice of vesting regulatory authority in elected ministers. The logic of countervailing powers is that a decision favouring an agency-based mode stems from a pro-agency coalition of interests effectively

²⁴ The opposite argument can also, however, be made. The concentrated nature of the burden imposed by economic regulation could be expected to generate higher intensity involvement by those upon whom the burden falls. The theory of regulatory capture counteracts this argument by positing that there is a cosy relationship between the regulator and regulated interests that detoxifies any conflict.

dominating the inside core of the policy community. Without this coalition, the normal department-based mode is expected in Canada's parliamentary system of government (see Section 1.1.1). Even without a predisposition toward regulating by ministerial department, a pro-department decision would be anticipated if those advocating a department-based mode are insiders. Formation of pro-agency and pro-department coalitions is explained by members of the policy community having different perspectives on the respective suitability of agency and department structures for achieving specific policy objectives and protecting, advancing and promoting their interests. Again, this last issue is pursued in Section 3.2.

There is an important difficulty with using the economic/social regulation distinction as a basis for explanation. The distinction, while conceptually useful, is unsustainable. Pesticide registration is a case and point. Viewed historically, federal regulation of pesticides in Canada is a story of changed regulatory objectives. The trend over time was to move away from classic economic regulation and toward incorporating greater concern for controlling the health and safety effects of pesticide use (see Chapter 4). Pesticide registration today is an excellent example of what Nemetz, Stanbury and Thompson call "hybrid regulation".²⁵ The terms economic and social regulation are therefore properly understood as monikers for the general principle that the nature of regulation has conflict-related consequences for the pattern

²⁵ The concept of hybrid regulation is discussed in Nemetz, Stanbury and Thompson, "Social Regulation in Canada".

of interest politics in policy communities and, through this, for the choice of mode for regulation.

3.0 MODE PARADIGMS AND THE CHOICE OF MODE FOR REGULATION

This section develops the concept of mode paradigms, the second independent variable in the dissertation's theoretical framework. The relevance of mode paradigms to the policy community's choice of mode for regulation is discussed at the outset. Sections 3.1 and 3.2 subsequently explore in greater detail the particular ideas and beliefs comprising political actors' mode paradigms.

All members of the policy community come to the choice process with distinctive conceptualizations of the mode issue, or mode paradigms. These sets of ideas and beliefs inform their individual choice calculus - the problems and potential solutions they identify, their comparative evaluations of alternative modes, as well as their definitions of who has what status in the choice process. Mode paradigms also account for behaviour in the choice process since policy community members want to see their beliefs and ideas translated into the choice of mode for regulation. For both these reasons, analysis of the belief systems through which policy community

members interpret the mode for regulation is vitally important in understanding the dynamics of choice.²⁶

The emphasis on perceptual variables follows Linder and Peters' instructions for an improved theory of instrument choice.²⁷ Given the ambiguities and absence of guiding principles in the literature on regulation and government (re)organization, the mode issue is bound to have diverse meaning for the policy actors inside and outside government involved in making choices about the organizational arrangement for regulation. There is no authoritative basis for concluding, say, that one mix of structure, resources and processes is objectively better or worse than another. Accordingly, attitudes and judgements are based primarily on folklore. The choice of mode for regulation is a case where, as Seidman observes, "[w]hat people believe to be the virtues or vices of a particular form of organization is often more important than what they really are."²⁸ What matters is that, in the eyes of the policy community, one mode is judged to be good enough.

²⁶ The more general point that "justification is remarkably important in understanding both regulation and regulatory change in a variety of areas" is put very effectively by John G. Francis in The Politics of Regulation: A Comparative Perspective (Oxford: Blackwell, 1993), p. 7. Francis builds his argument from James Q. Wilson's seminal work "The Politics of Regulation".

²⁷ Linder and Peters, "Instruments of Government".

²⁸ Harold Seidman, "A Typology of Government," in Szanton, ed. Federal Reorganization: What Have We Learned?, pp. 33-57, at pp. 33-34.

The subjectivity of policy community members' mode paradigms takes on heightened significance in the context of making choices. Lack of objective knowledge makes trade-offs possible at the level of the policy community. It likewise creates room for the mode issue to be resolved in different ways. The key in both regards is that the mode-related ideas and beliefs circulating in the policy community are not only subjective, but subject to revision.

The immediate task is to begin to sketch in the ideational basis of the choice of mode for regulation. Discussion centres on two related sets of ideas and beliefs that are part of policy community members' mode paradigms: conceptualizations of the mode as an instrument of public policy and the criteria used to evaluate potential mixes of structure, resources and processes. An effort is made to link these ideas and beliefs to other variables in the dissertation's explanatory framework.

3.1 Conceptualizations of the Mode for Regulation

In examining the choice of mode for regulation it is helpful to distinguish several basic conceptualizations of the mode for regulation. Consider first: What is the mode? The mode may be an end in itself. As happened in the pesticide registration review case, however, it is more likely that policy community members see the mode in instrumental terms.

Alternative conceptualizations of the mode as a means for accomplishing objectives can be derived from the administrative theory and politics models of government (re)organization. Under the precepts of the administrative theory model, the organizational arrangement for regulation is strictly a tool of administration. Remixing the mode's structure, resources and processes is consequently a way to improve government performance. The principal goals of reform are economy, efficiency and effectiveness in regulatory programmes and policies. The politics model, on the other hand, interprets the mode as a tool for gaining and losing political advantage. Amongst the purposes of reform in that case might be altering the image of a regulatory programme, giving the appearance of change in an area of regulatory policy, securing an institutional niche for a particular interest, or making gains in representation and visibility in the regulatory process.

The administration-politics dichotomy is no less arbitrary when applied to policy community members' understandings of what the mode for regulation is than elsewhere. As we will see in Chapters 6 and 7, the political actors involved in making choices about the appropriate mix of structure, resources and processes for pesticide registration did not fall exclusively into one camp or the other, but instead conceived the mode issue, in varying degrees, as a matter of administration and politics. Maintaining a distinction between the mode as administration and the mode as politics is nevertheless useful for bringing order to policy community members'

diverse mode paradigms. The critical theoretical benefit is in highlighting subsets of ideas and beliefs that in their essence and implications are qualitatively different.

Conceptualizations of the mode for regulation should also be differentiated on the basis of what the tool comprises in the eyes of members of the policy community. Academic scholars generally reduce the mode to a structural arrangement. The dissertation proposes a more expansive mode concept, a multi-dimensional organizational arrangement of structure, resources and processes. The most compelling reason for this unconventional approach is that we know next to nothing about policy community members' "empirical 'pictures'" of the mode for regulation.²⁹ As Linder and Peters remind us, these are an essential part of the dynamics of designing delivery mechanisms for regulation. Therefore, they must be accorded a prominent place in any explanation of choosing modes for regulation.

The pesticide registration review testifies that policy community members' pictures of the mode are often far removed from the academic literature.³⁰ Given a role in designing a delivery mechanism for regulation, members of the policy

²⁹ This useful terminology is from Linder and Peters, "Instruments of Government", p. 41.

³⁰ This provides an interesting counterpoint to the oft-made observation that regulation is one area where there is a history of political and academic debates influencing each other. On the deregulation movement of the 1970s and 1980s, for instance, see Derthick and Quirk, The Politics of Deregulation, pp. 238-239 where the convergence of elite opinion is a central variable in their explanation of deregulation, and John G. Francis, The Politics of Regulation: A Comparative Perspective (Oxford: Blackwell, 1993), p. 6.

community are not indifferent to structure, resources and processes as organizational solutions to regulatory failure and other problems. Their attitudes towards the three elements are influenced by tractability in fact, and according to the folklore.

The PRR case study suggests, in addition, that there are many solitudes where mode paradigms are concerned. The government (re)organization literature tends to paint a picture of a design process in which two broad perspectives on administrative machinery collide, one anchored inside government and the bureaucracy and the other outside in the private sector. Such analysis is not nearly subtle enough.

Ideas about what the mode for regulation is and what it is comprised of lie at the core of policy community members' diverse mode paradigms. They imply conclusions about:

1. the nature of the mode "problem";
2. what can be accomplished by reforming the mode;
3. the range of mode-based solutions available; and
4. the criteria to be used in making comparative evaluations of candidate modes.

As will be shown, the pesticide registration review hints at the necessity of adding another important variable in mode paradigms to the list: 5. views on who legitimately participates in the design of organizational arrangements for regulation.

Analytical clarity requires grouping and sorting the ideas and beliefs making up policy community members' mode paradigms into manageable categories. It is useful in this regard to distinguish "substantive" ideas from "procedural" ones. Substantive ideas (e.g. 1. to 4. above) affect the content of decisions about the appropriate mix of structure, resources and processes in the regulatory machinery. Procedural ideas (e.g. 5. above) are very similar to what Scharpf calls "boundary rules".³¹ They have implications for how choices are made, or who makes them.

Mode paradigms - underlying ideas about, for instance, whether the mode is a tool of administration or politics, or a uni- or multi-dimensional arrangement and the conclusions thereby suggested - have dual significance in the dynamics of choice. They act as filters, screening the options that circulate in the policy community. Networks of inter-related ideas about the organizational arrangement for regulation also guide policy community members' actions in the choice process. Political actors develop, promote and defend mode paradigms that serve their needs and objectives. They moreover link up with allies to try to change the dominant conception of the mode issue in the policy community.

³¹ Scharpf, "Decision Rules, Decision Styles and Policy Choices", pp. 152-153.

3.2 Evaluating Modes for Regulation

Policy community members' mode paradigms include ideas and beliefs about the appropriate criteria for choosing between candidate organizational arrangements for regulation. The literature on instrument choice tends to associate policy instruments with uni-dimensional decision criteria (e.g. political, economic and ethical). It is more reasonable to think that policy community members make their choice of mode for regulation based on multiple criteria. The major determinants identified in the literature include: political tradition; familiarity; intuition; professional bias; ideology; vote-maximizing potential; the instrument's degree of coercion; and its "goodness of fit" with the policy problem. Theories of government (re)organization tell us that administrative factors, such as the quantity of resources required to set up and operate a new regulatory system, are also part of the choice calculus.

Another way of looking at the choice calculus is to concentrate on the perceived attributes of modes for regulation as criteria of appraisal. Mixes of structure, resources and processes can be judged in terms of their capacity to organize or resolve conflict, their implications for participation, responsiveness and accountability or their contribution to efficient and effective regulation. These, it will be shown, were prominent considerations in the choice calculus of the 1988-92 pesticide registration review.

There is no hard and fast truth about the attributes of different modes for regulation. The folklore - and hence a key element in the dynamics of choice - is made up of sets of ideas about:

Conflict

- What is the appropriate site for resolving differences? A single department? The interdepartmental arena? At the Cabinet table? In the House of Commons? Amongst non-elected members of a collective board?
- To what extent can - and should - the mode for regulation be used as a way to dampen conflict? To sustain conflict?
- Is one mode better at conflict-dampening/conflict-sustaining than another? Why? Vogel's work on national styles of regulation suggests, for instance, that regulation by executive department creates a regulatory policy culture that facilitates accommodation.³²

Participation, Responsiveness and Accountability

- Who is a legitimate participant in regulatory decision-making? At what stages?
- What are the appropriate mechanisms for ensuring participation? Regular but non-obligatory

³² Vogel, National Styles of Regulation, Chapter 7 on "Government Regulation and Comparative Politics", which compares the British and American regulatory policy styles. Vogel does not directly deal with the issue of organizational arrangements or modes for regulation. However, he links national approaches for regulation to national and sub-national political economies. A natural evolution in this line of analysis is to consider the patterns of policy- and decision-making that comprise the micro level of regulatory styles. This is arguably consistent with Vogel's own desire to further disaggregate regulatory policy processes.

consultation between regulators and interested parties? Formal hearings?

- Should the mode be responsive to external pressures? Is resilience necessary for regulatory decisions that are in the public interest? When does responsiveness become capture?
- Accountability to whom? For what? Political accountability is only one of a series of accountability relationships. Financial/managerial accountability may also be a factor in designing modes for regulation.³³

Efficiency and Effectiveness

- Is one mode a more efficient way to regulate than others? As a general rule, or in specific circumstances only? Why?
- Is effectiveness calculated on what Moynihan calls a programme or policy basis?³⁴ When the former approach is used, what matters is the mode alone (e.g. the pesticide registration system). The policy approach takes greater account of inter-relationships between the mode and other government activities. It would look, for instance, at the contribution the pesticide registration system makes to effective agricultural policy, or to the effectiveness of the entire web of government regulation of pesticides.

³³ The most thoughtful discussion of accountability relationships is found in Patricia Day and Rudolf Klein, Accountabilities: Five Public Services (London: Tavistock, 1987).

³⁴ See Daniel Patrick Moynihan, "Policy vs. Program in the 1970s," The Public Interest, 20 (summer 1970), pp. 90-100.

Exposing the folklore by piecing together policy community members' answers to these kinds of questions is a necessary step toward improving knowledge about the ideational basis of the choice of mode for regulation.

Finally, there is no reason to think that all members of the policy community rely on the same combinations of evaluative criteria, or interpret the criteria in the same way. The standards against which policy community members judge alternative arrangements grow out of their basic conceptualizations of the mode. The availability of highly trained toxicologists might be amongst the central considerations for a policy community member who sees the mode as a tool of regulatory administration. When the mode is conceived as an instrument of politics, it is more likely that other kinds of factors, such as the access provided (or denied) to regulatory decision-making, dominate the choice calculus.

It is also important that the assessment of candidate modes is a function of political actors' formal roles in the policy community. Consider the bureaucracy. How a mode stacks up against administrative criteria must be pivotal in the choice calculus of regulatory authorities who have a statutory obligation to operate the mode and thereby regulate according to prescribed standards. Other segments of the policy community may be concerned about resource requirements, accountability relationships and the like; this is not, however, intrinsic to their roles. Even within regulatory bureaucracies, patterns of variation should be expected. Policy- and

politics-related arguments about the mode are bound to play out and dominate in the upper echelons of the bureaucracy (rather than amongst working-level officials) since this is consistent with the dialectic development of public policy by senior bureaucrats and politicians in the modern state.

4.0 DECISION STYLES AND THE CHOICE OF MODE FOR REGULATION

This section develops the third independent variable in the dissertation's explanatory framework. A decision style refers to the body of rules and practices governing how choices are made about the mode for regulation. The basic hypothesis is that these rules and practices have shaping or constraining power over the mix of structure, resources and processes settled on by the policy community as the organizational arrangement for regulation. The decision style makes its material contribution to the distribution of power in the policy community by establishing the formal and informal "rules of the game" within which interests and their mode paradigms interact. From this interaction, in turn, emerge policy community-level choices about the mode for regulation.

The concept of decision styles raises important issues in the context of developing a theoretical perspective on choosing modes for regulation. First, we need to be able to identify the salient features of a decision style. What particular rules and

practices have shaping or constraining power over mode choices? The second issue is a natural extension of the first. How do these rules and practices achieve such an effect? Put another way, how do they help to govern the transformation of interests' strategic activities, preferences and mode paradigms into mode choices?

4.1 Two Styles for Regulatory Reform: A Comparison

We can begin to understand the impact of decision styles on the choice of mode for regulation by comparing two paradigmatic processes for regulatory reform. These are the regulatory negotiation model and, for lack of a better term, the conventional model.

The regulatory negotiation model was developed by American legal scholars in response to the declining legitimacy of regulation.³⁵ In this model, the regulator invites 20 to 25 representatives of interests affected by regulation to negotiate an agreement on the terms of an upcoming rule of general application or a future regulatory system face-to-face. The negotiation process is directed by a neutral party.

³⁵ For a more careful elaboration of this model and its origins see: Daniel J. Fiorino, "Regulatory Negotiation as a Policy Process," PAR, 48:4 (July-Aug. 1988), pp. 764-772; Philip J. Harter, "Negotiating Regulations: A Cure for the Malaise?" Georgetown Law Rev., 71 (Oct. 1982), pp. 1-118; Henry H. Perritt, Jr. "Negotiated Rulemaking in Practice," J. of Policy Analysis and Mgmt., 5:3 (spring 1986), pp. 482-495; and Lawrence Susskind and Gerard McMahon, "The Theory and Practice of Negotiated Rulemaking," Yale J. on Regulation, 3:1 (fall 1985), pp. 133-165.

The regulator's position at the table is as a party-at-interest. While forfeiting some degree of power over regulatory outcomes to outside interests, the regulator retains the right, in principle, to withdraw from the process and propose and potentially implement new initiatives on its own. The central premise of the regulatory negotiation model is that multi-lateral bargaining improves the efficiency of regulation and leads to outcomes that faithfully reflect the public interest because it surmounts problems of uncertainty and limited information.³⁶

By implication, the regulatory negotiation model defines the broad contours of an alternative. This is where regulatory reform is the result of one-on-one pressure politics and consultation between the regulator, regulatees and other segments of the policy community. The interests served are strictly narrow and private. For the regulator, the purpose of reform may be to aggrandize its mandate or fend off challenges to its turf from other governmental players. Industry actors may push to see regulatory barriers torn down so that they can enter contestable markets. This model is termed here the conventional model of regulatory reform.

³⁶ This premise is frequently attacked in the public choice literature. For Scharpf, for instance, the bargaining which defines the regulatory negotiation model is characterized by participants pursuing their self-interests. Scharpf argues that a "problem-solving policy style" is necessary to achieve "common goals and the cooperative search for solutions that are optimal for the group as a whole". See his "Decision Rules, Decision Styles and Policy Choices", at p. 159.

The fundamental difference between the regulatory negotiation model and the conventional model from the perspective of the dissertation is the presence or absence of negotiation. This is apposite because in the theory of regulatory negotiation it allegedly determines the substantive content of agreements about regulatory reform. Unfortunately, the literature is vague about how this happens. Nor can the theory account for the detailed content of regulatory outcomes beyond predicting that the outcomes will meet the illusive "in the public interest" standard. It is clear, however, that shedding additional light on the negotiation dynamic is critical to building a sound theoretical perspective on mode choices.

Consider again the regulatory negotiation model. Its operation depends upon policy community representatives being prepared to compromise on the terms of regulatory reform. Several forces drive the process, such as the desire to have influence and bring closure to regulatory issues, and the substantial investment of resources required to participate. It is also essential in this model that parties value sub-issues within the scope of the negotiation differently.

The prevailing decision rules are part and parcel of the dynamic of negotiation. It matters in the theory of regulatory negotiation whether consensus support is required for the entire package of reforms, or whether majority approval is sufficient for some sub-issues and unanimity necessary for others. Parties' preference orderings

and BATNAs (best alternatives to a negotiated agreement) are another parameter in the process of negotiation.

The key ingredient missing from the conventional model of regulatory reform is a transfer of government authority over the terms of regulation to non-governmental interests in the policy community. The regulatory negotiation model postulates that private interests legitimately exercise public power over regulatory outcomes. The extent of this assumption of power, or where the line is appropriately drawn between the role of government and the role of other members of the policy community, is not specified. There is no question, however, about the contention that the pressure politics and consultation of conventional regulatory reform are qualitatively different from negotiation. Neither contemplates an arrangement of shared power.

From a distance, the presence or absence of negotiation really describes a specific kind of style for making decisions about regulatory reform. The general conclusion therefore to be drawn from comparing the negotiation and conventional models is that the rules used for reaching decisions about regulation - for example, whether there is explicit negotiation, whether decisions are reached by consensus or majority rule, and even the management strategy adopted for choice - affect the outcome. By extension, a satisfactory explanation of the choice of mode for regulation must take into account the shaping power of subtle differences in the formal

and informal, and the macro- and micro-level rules and procedures that govern the choice process.

That said, the contrast of negotiated with conventional regulatory reform is especially instructive for understanding the choice of mode for regulation in the case of the pesticide registration review precisely because the review had elements of both. The 1989-90 stage of the review, centered in the Review Team, was strikingly similar to an exercise in regulatory negotiation. For this reason, factors such as:

- . the preference orderings of Review Team members and their constituencies;
- . the willingness of Review Team members to accept second-best options in return for gains in other areas of pesticide regulatory reform;
- . extensive consultation with interests from all corners of the policy community;
- . a strong commitment on the part of members of the Review Team to making decisions by consensus and according to fixed timelines; and
- . the working relationship between the Review Team and its secretariat

help explain the Review Team's support for an adequately funded, independent agency reporting to the Minister of Health and Welfare. When the over-riding objective is to achieve consensus, the regulatory negotiation model also predicts that the choice of mode will be a compromise that satisfies no one fully, although it may be highly original.

The pesticide review's 1991-92 phase, when the federal government decided to retain a modified version of the existing Agriculture-centered mode for regulation, closely conformed to the conventional model of regulatory reform. The argument that one consequence of the hierarchical intra-governmental process is to link the choice of mode upward to broader regulatory and political issues has intuitive appeal. If it holds, a possible corollary is that the mode will be selected based on a fundamentally different set of choice criteria. The mode options may be judged, for example, in light of the operational requirements of the proposed regulatory system, the government's political priorities and the agendas of departments and agencies with roles in regulation. As we will see, this shift in the dominant mode paradigm is a reasonable interpretation of what happened in the latter stages of the PRR.

4.2 The Decision Style and the Interest and Ideational Bases of the Mode Choice

The regulatory negotiation model is a valuable source of preliminary insight into the manner in which decision styles relate to the first variable in the dissertation's explanatory framework, namely interest politics. The focus to this point has been on the importance the model assigns to how the policy community goes about making its choice of mode for regulation. However, the preceding discussion has also suggested that the model can be construed as stressing the relevance of not only the rules and procedures for arriving at choice, but who participates in the choosing.

The fundamental contention of the regulatory negotiation model is that the distribution of power in the policy process determines the nature of decisions about regulatory reform. To explain choices about the mode for regulation, the theory refers us first to the dynamic of multi-lateral bargaining. It next points to variables reminiscent of the pluralist literature on group politics and policy communities, such as:

- . the ripeness of the regulatory issue on the table;
- . dialogue and other interaction between the appointed representatives of the policy community;
- . parties' access to institutions with the power to impose or oppose a negotiated agreement; and even
- . the nature of regulation on the grounds that it "determines the likely intensity of interest group feeling on regulatory issues".³⁷

According to the logic of regulatory negotiation, then, it is the combination of bargaining and interest politics that defines the power structure of the process for choosing modes for regulation.

This gives us a clue about why a policy community may reach quite different conclusions about the appropriate mix of structure, resources and processes at two points in time. A major lesson from regulatory negotiation at the U.S. Environmental

³⁷ Perritt, "Negotiated Rulemaking in Practice", p. 485.

Protection Agency³⁸ and elsewhere, according to Harter³⁹, is that the prospects for a successful outcome - a negotiated agreement that is implemented by the regulator - depend upon the relationship between the regulator and the committee struck to negotiate new regulations. The regulator must be committed to basing its actions on any agreement reached by the policy community's representatives. The negotiating committee, for its part, must integrate the regulator into the negotiation process. If these conditions are not met - for instance, parties to the negotiation become isolated from the governmental and bureaucratic interests upon whom implementation depends - the regulatory negotiation model predicts that a prepackaged agreement will not be implemented because the political costs of renegeing on the negotiated agreement are then sufficiently low.

An unsuccessful exercise in regulatory negotiation produces two different policy community-level decisions. In certain respects, this is what happened vis-a-vis the mode for regulation in the pesticide registration review.⁴⁰ The theory of

³⁸ Pesticide regulation is familiar territory for regulatory negotiations at the EPA. The process was used, with varying success, to rewrite regulations for emergency exemptions from registration and for farmworker protection. For a discussion see Lawrence Susskind and Laura Van Dam, "Squaring Off at the Table, Not in the Courts," Technology Review, 89:5 (July 1986), pp. 36-72.

³⁹ Harter conveyed this message at a regulatory negotiation seminar sponsored by Regulatory Affairs, Treasury Board Secretariat, Government of Canada, Ottawa, May 26, 1992.

⁴⁰ As discussed above, the first and second phases of the pesticide registration review roughly corresponded with the regulatory negotiation and conventional models of regulatory reform respectively. It is also reasonable, however, to characterize the entire review as an (unsuccessful) exercise in regulatory negotiation where, once a mode

regulatory negotiation tells us that part of the explanation for divergent mode choices lies in an uncomfortable regulator-parties relationship. This relationship derives its importance from the fact that the 1989-90 Review Team decision regarding the appropriate mix of structure, resources and processes in the mode for regulation was arrived at through a process of negotiation.

Revisiting the concept of boundary rules in interests' mode paradigms allows us to push theory-building a step farther. Section 4.1 observed that the regulatory negotiation model is silent about the dividing line between the role of government and the role of other political actors in the policy community. This failure to address what is essentially a boundary rule (as defined in Section 3.0's discussion of mode paradigms) is highly problematic. Boundary rules are crucial to understanding policy community-level regulatory outcomes. The proposition initially is simply that boundary rules may be disjoint. Members of the policy community may arrive at the choice process with disparate views on who legitimately participates, or in what capacity they participate. To unlock the origins and implications of such different mode paradigms is to improve both the theoretical and empirical sides of knowledge about choosing machinery for government regulation. The case study in Chapters 4 through 7 indicates that different boundary rules were an important factor in the two mode outcomes of the 1988-92 pesticide review.

decision was arrived at through negotiation, the negotiation dynamic was removed and the "normal" process took over. The issue of how best to characterize the PRR is addressed again in Chapter 8.

Finally, the regulatory negotiation literature grounds an important hypothesis about the connection between interests and their resources in the politics of choosing modes for regulation. We speculate that the nature of the decision style revalues the resources policy community members bring to bear on the politics of choice. A negotiation-based process puts a premium on:

- . a willingness to cooperate and compromise over the mode for regulation - as between two or more possible modes and in relation to other issues being negotiated;
- . the ability to propose mode options that anticipate and are sensitive to the needs and objectives of other segments of the policy community; and
- . a willingness, when necessary, to accept a less than optimal mode choice but maintain solidarity when the choice is presented to the regulator.

Political actors who possess such skills at diplomacy presumably have heightened shaping power over the policy community's choice of mode for regulation. These resources lose their potency, however, when the mode for regulation is chosen using a conventional style of regulatory reform. The pesticide registration review experience reveals in greater detail the effect of the nature of the choice process on the relative usefulness of policy community members' resources and, hence, on their ability to embody preferences in the machinery for government regulation.

5.0 SUMMARY

This chapter detailed and refined the dissertation's theoretical perspective. The dependent variable, the mode for regulation, was the focus of attention in Section 1.0. The mode is an organizational arrangement for delivering regulation. It has three elements: structure, resources and processes. The tractability of these elements was shown to be affected by the principle of ministerial responsibility and its logical consequence the ministerial department; executive preeminence vis-a-vis the machinery of government; political priorities; and the bleeding of regulatory programmes across government departments. Emphasis was also put on the peculiar dynamics of reform, how moving from one mode to another, or revising an existing mode affects the policy community's choice.

The first explanatory variable in the dissertation's perspective on choosing modes for regulation is interests politics. As argued in Section 2.0, political actors from both state and society seek, through the use of resources, to have their preferences embodied in the mix of structure, resources and processes decided on for regulation. Relative status in the choice process is not constant over time; policy community members shift from insiders to outsiders, and vice versa. This section also examined the hypothesis that the choice of mode for regulation can be traced to the level of conflict in the policy community, especially its implications for the formation of mode-related alliances. Lastly, the notion of a state-directed policy

community was proposed as a summary measure for understanding the fundamental interest politics of mode choices.

Mode paradigms, or policy community member's ideas and beliefs about the mode for regulation, are the second factor in the distribution of power over the choice of mode. Section 3.0 discussed alternative conceptualizations of the mode as an instrument of public policy as well as the evaluative criteria that may be relied on in making choices between modes. While very little is known about policy community members' mode paradigms, these are an essential part of any explanation of the choice of mode for regulation. The folklore about possible modes and conflict; participation, responsiveness and accountability; and efficiency and effectiveness must accordingly be revealed.

The final variable in the dissertation's perspective is the decision style, or the rules and procedures for making decisions about the mode for regulation. Section 4.0 used a comparison of the regulatory negotiation and conventional models of regulatory reform to argue that the manner in which the policy community goes about settling on the machinery for government regulation has implications for the nature of the choice (e.g. whether it is a creative compromise, or tied into larger political issues), but also for the regulator's relationship with other political actors and the deployability of various resources and their respective value in shaping mode outcomes. Special

attention was paid to having (or not having) a formal negotiation dynamic in the choice process.

Chapter 4

MACRO ANALYSIS: PESTICIDE REGISTRATION IN CANADA

This chapter begins the dissertation's case study of the 1988-92 federal pesticide registration review. The purpose is to set the broad macro context for the review, and in particular for its two choices about the appropriate mode for pesticide registration. Neither the review nor the mixes of structure, resources and processes that emanated from it can be properly understood without reference to the overall dynamics of pesticide registration in Canada.

The chapter is divided into three sections. The objects of regulation, pesticides, are introduced in the first. Sections 2.0 and 3.0 examine the regulatory regime for pesticides at the federal level in Canada. The focus throughout is on the compulsory registration system. Section 2.0 traces with broad brushstrokes transformation in the pesticide policy community over the course of a century. Section 3.0 explains how the registration system came to be battered by its critics in the 1980s. As documented in Section 3.1, the existing Agriculture-centered mode for regulation was implicated in many calls for reform. A specific event finally brought pressures for reform to a head: the Minister of Agriculture's decision to deregister the pesticide alachlor. Section 3.3 shows that deregistration of alachlor galvanized the registration community and forced pesticide registration onto the federal government

agenda. It was against this backdrop of both historical and more proximate circumstances that vigorous debate about the preferred mode for regulation took place in the 1988-92 pesticide registration review.

1.0 BACKGROUND ON PESTICIDES

This section paints a thumbnail sketch of pesticides. After identifying what pesticides are, the section looks briefly at their historical origins. Section 1.3 then examines two dimensions of post-war pesticide use in Canada and around the world, namely diversification (in products, in uses and in users) and the development of a commercial pesticide manufacturing industry.

1.1 What are Pesticides?

"Pesticide" is the generic term for chemical substances that -because they are inherently toxic to living organisms - are used to control pests. Many organisms have the status of pest in contemporary Canadian society: insects that damage agricultural crops and weeds that compete with crops for soil nutrients and light; fungi and viruses that attack trees and plants; rodents that feed on stored produce and beetles that destroy leather goods and wood; aphids and caterpillars that infest homeowners' lawns

and gardens; moths that eat woolens; and disease-transmitting micro-organisms and mosquitoes. Pesticides, or pest control products as they were originally known, are consequently widely used in agriculture and horticulture, forestry and industry and in households and public health programs.¹

There are traditionally considered to be four major classes of pesticides. Insecticides, herbicides, rodenticides and fungicides target insects, weeds, rodents and fungi respectively. In recent decades, the pesticide umbrella has expanded. Products that do not strictly speaking control pests, such as plant-growth regulators, defoliants, fruit-thinning agents and substances that prevent deterioration during storage and transport, are now treated as pesticides for the purposes of regulation in many countries. So too are non-chemical controls made possible with developments in biotechnology.

Pesticides as we know them are formulations of active and inert ingredients. Active ingredients are the basic foundation chemicals that attack pests. These chemicals are processed with inert ingredients, such as carrier substances and solvents, to improve usability. The most common pesticide formulations are sprays, dusts, aerosols, fumigants, impregnates, baits and repellents and attractants.

¹ An excellent layperson's book on pesticides is George W. Ware, The Pesticide Book (San Francisco: W.H. Freeman, 1978).

1.2 The Origins of Modern Pesticides

While the term pesticide was popularized only after World War II, chemicals have been used in the fight against pests and disease since very early in history.²

Hassall traces the first efforts at insect control to classical Greece and Rome, where sulphur and arsenic were used against lice, fleas and wasps and olive oil was used as a seed treatment. There are reports of arsenicals and tobacco extracts being used as primitive insecticides in China as early as the 16th century. By 1800, the application of soap was another widely used technique for controlling insects, both in agriculture and against human disease.

The scientific and industrial revolutions of the second half of the 19th century led to major pesticide advances. At the root of the progress were home-made mixtures of chemicals developed by agricultural producers, often to deal with specific pest problems. Farmers in the United States laid the foundations for chemical insecticides when they developed an arsenic poison, Paris green, to help them battle against an invasion of Colorado beetles that destroyed potato crops in the late 1860s. An equally important milestone was the development of Bordeaux mixture. Made of copper sulfate and calcium hydroxide, this mixture was originally formulated in

² Two excellent sources on the history of pesticides are: M.B. Green, Pesticides: Boon or Bane? (London: Paul Elek, 1976), particularly Chapter 1; and Kenneth A. Hassall, The Chemistry of Pesticides: Their Metabolism, Mode of Action and Uses in Crop Protection (London: Macmillan, 1982), Chapter 1.

France in 1882 to control downy mildew on grape vines. A few years later, legend has it, a grape grower discovered by accident that Bordeaux mixture also killed charlock (a weed) without damaging other vegetation. These developments were the foundations for three of the main classes of modern pesticides: insecticides, fungicides and selective herbicides. They also raised the prospect of more sophisticated inorganic chemical compounds which could be used effectively in the war against agricultural and other pests.

The latter years of the century also witnessed major strides in organic chemistry.³ The new knowledge was rapidly applied in the production of dyestuffs and, soon after, in the discovery and development of synthetic pharmaceuticals for the treatment of human diseases. Scientists in Britain, Switzerland and Germany conducted preliminary research into the possibility of creating synthetic organic compounds to combat pests and disease in plants and animals; significant advances were not, however, made until World War II.

In the meantime, new pest control products continued to be introduced. These were primarily more complex inorganic substances, such as sulphur derivatives, arsenicals and compounds of lead, copper and mercury. The first scientific studies into the use of chemicals for crop protection were also conducted in this period.

³ That is the chemistry of compounds of carbon, hydrogen and oxygen.

1.3 Pesticides in the Post-War Period

1.3.1 A Profile of Proliferation: Of Products, Of Uses and Of Users

Pesticides came of age in the post-war era. The first thirty years after World War II were marked by the proliferation of synthetic pest control products. Three specific technical breakthroughs explained this: Mueller's discovery of DDT's insecticidal properties at the Geigy laboratories in Switzerland⁴ and the discovery of organophosphorous insecticides and selective phenoxyacetic herbicides such as 2,4-D.⁵ Some 6,000 compounds were eventually patented, 10% of which reportedly came into commercial use.⁶ Approximately 1.8 million tonnes of pesticides were produced and applied in the world each year by the mid 1970s.

As Green observes, not only the technical but also the social and economic conditions were right after the war for the commercial production of synthetic organic pesticides. Take the case of agriculture. The first two major synthetic crop protection chemicals (i.e. DDT and the phenoxyacetic herbicides) were comparatively inexpensive, were easy to apply and were believed to be harmless to non-target

⁴ Mueller won the 1948 Nobel prize in medicine for this work.

⁵ Green, Pesticides, p. 10.

⁶ Ibid.

species. It was also critical that pesticides held out the promise of substantially improved crop yields at a time when farm labour was scarce, yet there was mounting pressure on the world's food supply.

The early post-war period was also characterized by diversification in the uses of pesticides. During the war chemicals had been used for the first time to systematically control the spread of vector-borne human diseases, particularly typhus. The success of these pioneering efforts demonstrated that pesticides could be valuable tools in peacetime public health programmes. Authorities subsequently used pesticides to arrest the spread of disease in urban areas. They also increasingly turned to pesticides in the fight against insect-transmitted tropical diseases such as malaria and yellow fever.

There were other non-farm users as well. The leading ones included homeowners, pest control operators, turf and sod producers, nurseries and ornamental gardens and industrial plants. Pesticides were also applied alongside railway tracks and highways and in utility rights-of-way to control unwanted vegetation.

Despite diversification, the principal user of pesticides continued to be the agricultural/horticultural sector.⁷ Farm uses accounted for over 90% of pesticide

⁷ Including livestock production. Forestry uses are also included in many of the statistics for this sector. There are, however, major differences in how pesticides are used in agriculture/horticulture and in forestry. For instance, forestry pesticides are

sales in most developed countries.⁸ Herbicides represented the largest share of this market (close to 60% in many cases⁹), followed by insecticides and fungicides.

The rationale for using pesticides in agriculture was simple: they improved both the quantity and quality of crop yields.¹⁰ Pests were reportedly responsible for 10-30% of crop losses in North America.¹¹ Significant losses also occurred post-

applied over an extended time period (i.e. many years) and for two distinct purposes (i.e. to promote regeneration and to protect mature forests from insect and disease damage). A good reference on the use of pesticides in forestry is Canadian Council of Resource and Environment Ministers, Pesticides Workshop Proceedings, Toronto, March 8-11, 1982. The term "horticulture" generally refers to fresh and processed fruits and vegetables, floriculture, nursery crops and honey and maple products.

⁸ In Canada, agricultural needs currently account for 86% of the value of all pesticides sold. See Industry, Science and Technology Canada, Pesticides: Industry Profile (Ottawa, 1991), p. 1.

⁹ In Canada, herbicide sales make up a slightly higher proportion of the market - about 77% - because of climate conditions and the grain-heavy crop mix. See M.H. Hawkins, R.R. Norby and J.H. Copeland, "A 'Made-in-Canada' Agricultural Chemical Industry", a paper prepared for the annual conference of the Canadian Agricultural Chemical Association, Saint Andrews, New Brunswick, September 1980, p. 25. The 77% figure is confirmed in ibid., p. 1.

¹⁰ The agriculture/horticulture sector in Canada has a special vocabulary related to pesticides. Producers use the term "crop protection chemicals" to refer to toxic substances for protecting growing crops. These include insecticides, crop and seed treatments, herbicides, miticides and fungicides (but not rodenticides). The more general term "agricultural chemicals" covers crop protection chemicals as well as fertilizers and other plant nutrients. The specialized vocabulary contributes to the difficulty in quantifying the use of pesticides.

¹¹ World Health Organization, Public Health Impact of Pesticides Used in Agriculture (England, 1990), p. 21.

harvest, for instance when insects and rodents attacked stored produce.¹² Pest infestations jeopardized the quality of produce from the point of view of both aesthetics and hygiene.

The upward trend in pesticide use in agriculture mirrored - and in large part was responsible for - the doubling in world pesticide production every ten years between 1945 and 1975. Several factors explained producers' increased reliance on chemicals. Changes in farming practices were of central importance. Governments and farmers embraced specialization as a way to increase the profitability of agriculture. Monoculture¹³ achieved this but not without a price. It also upset the balance of nature. With diminished species diversity, certain pests flourished and naturally-occurring insects and other organisms that had previously protected crops were wiped out. The newly-minted synthetic pesticide formulations provided a cost-effective solution to the emerging pest problem.

Resort to chemical solutions created new problems for agriculture, however, what van den Bosch termed the "pesticide treadmill".¹⁴ Pesticides are biocides. Their killing-power therefore extended beyond the organisms producers (and others)

¹² The Crop Protection Institute of Canada estimates that post-harvest losses currently amount to an additional 10-20 %. See its undated publication "Understanding Pesticides".

¹³ That is the planting, cultivating and harvesting of a single crop.

¹⁴ See Robert van den Bosch, The Pesticide Conspiracy (New York: Doubleday, 1978).

specifically targetted as pests. As a result, continued application of pesticides ironically sometimes provoked an explosion in the pest population. This occurred when natural predators were eliminated, either directly because of the broad-spectrum nature of pesticides or indirectly because their food supply was depleted. The target pests were then able to reemerge. The new generation was often more resistant to the pesticide than its predecessor. Moreover, other pest species that had previously been suppressed by natural enemies might also erupt. According to van den Bosch, it was customary for producers to respond with additional rounds of spraying and dusting.

Agricultural producers' dependence on pesticides was compounded by evolution. Over time, pests became immune to the toxic chemicals applied to them. Resistance developed in a number of ways. The most common was through a genetic trait that made a pest species less susceptible to attack; certain insects, for example, developed detoxifying enzymes in their bodies. When pesticides became ineffective because of resistance, the most viable solution for the farming community was frequently to apply more pesticides, or different - possibly more potent - ones.¹⁵

Other explanations of the escalation in the use of toxic chemicals in agriculture emphasized the importance of interest politics. The post-war period featured strong

¹⁵ Whether resistance led to reliance on more potent chemicals was one of the scientific controversies that emerged from Rachel Carson's *Silent Spring* (see below). Pest species that develop immunity to a particular pesticide may be less adaptable in other respects and therefore susceptible to attack from weaker pesticides.

pressure in the agricultural policy community to maximize food production while maintaining affordable prices, to improve financial stability and profitability in the industry and, in later years, to ensure that domestic agricultural production was competitive in world markets. By the 1970s, consumers demanded not only affordable but also aesthetically attractive and safe food. The policy paradigm from which initiatives to address these diverse goals emerged had pesticide use as a central plank. For van den Bosch, the key to understanding the persistent upward trend - at least in the United States - was a "pro-pesticide mafia" made up of members with powerful economic and other vested interests in the continued use of pesticides. The leading advocates according to van den Bosch were the agricultural chemical industry and agri-business, producer organizations, food processors, politicians, professional societies of agronomists, entomologists and weed scientists, as well as groups concerned about threats to free enterprise and agri-technology.

The 1970s and 1980s brought a second generation of synthetic pesticides into use. These products were based on improved understanding of biological and biochemical mechanisms. As a result, they tended to be more effective at lower doses. Total world production of agricultural pesticides nevertheless doubled again between 1975 and 1985, to an estimated 3 million tonnes.¹⁶ This market was valued at \$15.9-billion (U.S.).¹⁷ An additional \$100-million (U.S.) was spent on pesticides

¹⁶ World Health Organization, Public Health Impact of Pesticides, p. 26.

¹⁷ Ibid., p. 27.

for urban public health programmes.¹⁸ In Canada, over 35% of the total volume of pesticides sold annually was estimated to be used in urban areas.¹⁹

The pattern of proliferation showed some signs of change by the mid 1980s. Again, the case of Canadian agriculture is illustrative. The 1991 census documented the first reversal in pesticide use by agricultural producers since 1970.²⁰ The number of Canadian farms reporting herbicide use dropped approximately 16.2% between 1986 and 1991.²¹ Insecticide and fungicide use plummeted by almost 32%. The hectares of crops sprayed or dusted with these chemicals also declined, by 6% in the case of herbicides (to 21.6 million hectares, primarily in the general farming sector) and by almost 40% in the case of insecticides and fungicides (to 2.8 million hectares, primarily in the horticultural sector). Industry figures seemingly confirmed the trend, showing that Canadian farmers used only 5 to 10 grams of chemicals per acre compared with over 9,000 grams per acre in the 1960s.²² The turnaround in

¹⁸ Ibid., p. 22.

¹⁹ Ontario Task Force on Health and Safety in Agriculture, Agriculture Chemicals and Farm Health Safety, vol. III, December 1984, cited in Ronald N. Labonte, "Pesticides and Healthy Public Policy," Cdn. J. of Public Health, 80 (July/Aug. 1989), pp. 238-242, at p. 240.

²⁰ Statistics Canada, Census Overview of Canadian Agriculture: 1971-1991, Cat. 93-348, Table 15, pp. 176-185.

²¹ Statistics Canada, Census of Agriculture, 1991, as reported in Eric Beauchesne, "Herbicides Out, Manure In," Ottawa Citizen, June 5, 1992.

²² From an interview with John Oliver, President and General Manager, DowElanco Canada Inc., in the Crop Protection Institute of Canada's Newsletter, vol. 3, September 1992, p. 3. These figures reflect the use of all farm chemicals, including fertilizers. The

post-war trends was partly due to the high cost of agricultural chemicals and lower farm incomes in the 1980s, as well as the availability of more effective second generation products. One of the most significant factors, however, was public pressure for more environmentally-friendly farming practices such as integrated pest management.²³ Despite their apparently reduced reliance on pesticides, Canadian producers still spent \$840-million²⁴ - or on average 5 % of total operating expenses²⁵ - on pesticides in 1988. An estimated 7.2 million kilograms of pesticides were applied that year by producers in Ontario.²⁶

real reduction in pesticide use is therefore unclear.

²³ Various interviews. IPM combines more restricted use of chemicals with crop rotation and other non-chemical practices.

²⁴ Crop Protection Institute of Canada. Herbicides represented 74 % of this amount; insecticides 6%; fungicides 4%; home and garden products 8%; and growth regulants, seed treatments and livestock treatments 8%. See note 32 below about the differences between industry and Statistics Canada data.

²⁵ The figure for operating expenses is much higher (25 % of total operating expenses) for horticultural producers because of their heavier use of insecticides and fungicides (Interview).

²⁶ This figure, attributed to the Ontario Ministry of Agriculture and Food, is reported in Bill Dean and Glenn Fox, "A Revised Federal Pest Management Regulatory System: Implications for Canadian Farmers," a discussion paper for the George Morris Centre, University of Guelph, May 1992, p. 41.

1.3.2 Development of the Pesticide Manufacturing Industry

The other side of the coin in the post-war period was the emergence of a highly oligopolistic pesticide industry. Large multi-national chemical manufacturing corporations anchored in the United States, Britain and Europe (principally France, Denmark, Germany, Belgium, Luxembourg and the Netherlands) dominated the market early on, and still do. Given similarities in the underlying chemistry, manufacturing pesticides was often a natural extension of a firm's activity in the pharmaceutical products market.

1.3.2.1 Industry Structure and Performance

The pesticide industry has three distinct sectors of activity. In the first, companies conduct research and development and produce basic foundation chemicals. The second sector combines active and inert ingredients into formulated products. Both kinds of manufacturing are done by the major firms. A very loose network of distributors, the third component of the industry, links manufacturers and users.

Within this broad structure, the so-called pesticide industry is in effect the crossroads of two fairly distinct industries. The most prominent of the two has always been the crop protection industry, made up of manufacturers of agricultural pesticides

and other chemicals. This industry tends to be organized on the basis of crop sectors. Firms in North America, for example, often specialize in producing products for corn and northern soya; cotton, rice and southern soya; horticulture; and cereals and oilseeds. The crop protection industry is also involved, although to a far lesser degree, in manufacturing "professional products". These include industrial insecticides, rodenticides and pesticides for use by pest control operators.

Chemical specialty manufacturing is the other, less well known component of the pesticide industry. Here, firms produce insect repellents, anti-microbials (e.g. toilet bowl and floor cleaners), wood preservatives and other non-agricultural pest control products. For chemical specialty manufacturers, pesticides are part of a family of chemical products which includes detergents, water treatment chemicals and waxes and polishes rather than, as in the case of the crop protection industry, agricultural chemicals.

Overall, the world pesticide market is dominated by a small number of vertically integrated firms supplying a large number of active ingredients and many pesticide formulations. One (or two) plants generally serve the total world market for any particular active ingredient. As a result, active ingredients are extensively traded. Formulated products, on the other hand, are highly specialized and tend to be designed for specific climate and crop conditions and application methods.

Formulating plants therefore generally operate with local and regional product mandates once in receipt of the necessary active ingredients.

The total value of the world pesticide market was \$30-billion in the mid 1980s.²⁷ The United States, the world's leading manufacturer, had an estimated 30% share.²⁸ Production by firms in Canada accounted for 3% of the world market.²⁹

More recently, changing use patterns have translated into major shocks in the industry. The chemical manufacturing industry as a whole (of which the pesticide manufacturing sector is a closely integrated part) responded to plunging profits with massive structural reorganizations in the late 1980s.³⁰ One consequence is that some of the largest chemical firms have now expanded into specialty chemical manufacturing. The global rationalization process has affected the pesticide industry in two main areas: the production of active ingredients and research and development.

²⁷ ISTC, Pesticides, p. 2.

²⁸ Ibid.

²⁹ Ibid.

³⁰ For an excellent description of recent industry developments see "World Chemicals: The Challenge of Asia," Economist, March 13, 1993, pp. 27-28, 30.

1.3.2.2 The Canadian Industry

Pesticides began to be manufactured on a commercial basis in Canada in the 1950s. With the building of the first formulating plants, the dye was cast for the future shape of the domestic industry. Ownership of the plants gradually shifted from distributors (e.g. Niagara Brand Spray Co. and Green Cross) to the multi-national chemical manufacturers. Despite occasional forays into manufacturing active ingredients, the predominant activity in Canada has always been formulation. However, one of the other characteristics of the Canadian industry is that some of the major suppliers to the Canadian market (e.g. BASF, Cyanamid, Dupont and ICI) have no manufacturing presence here, but instead act only as distributors of products manufactured elsewhere. Canadian subsidiaries of the multinationals "are not positioned to compete in foreign markets."³¹

The predominance of formulation activity in Canada is largely explained by the economics of pesticide manufacturing. The Canadian market is not large enough to support domestic manufacturing of active ingredients. It is more efficient for firms to manufacture active ingredients at only one (or sometimes two) plant and then distribute them to formulating plants around the world because they are used in such small quantities and can be shipped at relatively low cost per unit. It is also important that active ingredients can be imported into Canada on an effectively tariff-free basis,

³¹ ISTC, Pesticides, p. 2.

whereas substantial tariff barriers are applied to Canadian products entering other markets. Finally, Canadian-based formulation is the result of the need for pesticidal compounds that satisfy the peculiarities of Canadian crop mixes, climate conditions and application methods.

There are no reliable figures on the overall Canadian pesticide industry.³² Statistics Canada data on chemical products manufacturing and the manufacturing of agricultural chemicals help to paint a general picture of the industry's structure in the mid 1980s.³³ Home and garden pesticides were manufactured at eight plants, and non-agricultural pesticides and rodenticides at 31. There were approximately a dozen plants whose principal activity was manufacturing herbicides, fungicides and insecticides for use in agriculture. These latter establishments employed about 1,000 people, of whom 25% were directly engaged in manufacturing, and produced pesticides valued at around \$190-million each year. Only one or two plants manufactured foundation chemicals; all the rest were formulators.

³² For instance, Statistics Canada and the Crop Protection Institute of Canada both collect data on agricultural chemicals, but the data are non-comparable. CPIC uses retail sales figures which indicate a substantially larger market value than do the Statistics Canada figures. Reliable data on the non-agricultural component of the pesticide industry are virtually non-existent.

³³ Statistics Canada. Chemical and Chemical Products Industries, 1986, Cat. 46-250 annual; Chemical and Chemical Products Industries, Other Agricultural Chemical Industries, 1986, Cat. 46-250B 3729; and Industrial and Agricultural Chemical Products, 1984, Cat. 46-224 annual.

Over the course of the decade there was significant market upheaval. Consider again the market for agricultural pesticides:³⁴

- . The total value of the Canadian market for agricultural pesticides (domestic shipments and imports) peaked at \$625.6-million in 1984, but was \$434.0-million in 1987.
- . Exports increased during this period from \$22.8-million to \$37.7-million. They also steadily increased as a share of the total value of domestic pesticide shipments, from less than 5% in 1983 to almost 15% in 1987. The major destination for exports was the United States (which accounted for close to 70% of the total value of exports in 1987), followed by the European Community (17.2%) and Asia (6.2%).
- . Imports, on the other hand, were highly unstable in dollar terms: \$218.7-million in 1983, \$254.9-million in 1984 and \$173.4-million in 1987. However, there was a constant shift away from the United States as the major source of imported pesticides and toward the European Community and Asia over these years. In 1988, the United States supplied 74% of the total value of products imported to Canada, the European Community 14% and Asia 10%. Imports consistently made up 40% of the Canadian pesticide market.

The principal cause of fluctuations in shipments, imports, and the size of the domestic market and employment levels was extreme unpredictability in agricultural markets (especially cereal crops in Western Canada).

³⁴ In the language of Statistics Canada data collection, this is the "non-fertilizer agricultural chemicals" market. These figures are reported in convenient summary form in the ISTC report, Pesticides.

2.0 REGULATING PESTICIDES IN CANADA

This section discusses Canada's regulatory response to the pesticide problem from a historical perspective. As Section 2.1 shows, the nature of the problem itself evolved over time and in response to improved scientific knowledge. Section 2.2. examines in detail the development of Canada's pesticide registration system.

2.1 Pesticides as a Problem for Public Policy

In bringing about a revolution in the techniques of agricultural production and in the tools for controlling the spread of human and animal disease, pesticides created dilemmas. Initially these related primarily to the dangers of poisoning by ingestion and unscrupulous industry practices. Post-war developments in scientific knowledge refocussed the pesticide problem. From then on, pesticides could no longer be considered relatively benign substances for indiscriminate use. Toxicity was both their boon and bane.

The watershed event in the evolution of the pesticide problem was publication of Rachel Carson's Silent Spring in 1962.³⁵ Silent Spring synthesized the results of

³⁵ For an examination of the tremendous influence this work had on government policy see Frank Graham, Jr. Since Silent Spring (Fawcett Publications: Greenwich, CT, 1970).

scientific research on the effects of modern pesticide use on wildlife and the environment and human health. It was Carson's assessment that the new synthetic organic pesticides posed serious risks. She argued, based on the collected evidence, that these products persisted in the environment and many, being fat-soluble, accumulated in very high concentrations at the top of the food chain. Carson also reported that scientists had discovered that toxicity could be transported far beyond the immediate point of application by air and rain and in groundwater.

Much of the history of government regulation in the pesticide area in Canada is a response to the various problems perceived to be associated with using toxic chemicals to control pests. As perceptions changed, so did the nature and scope of regulation. This was especially true with regards to initiatives intended to address concerns about health and safety.

2.2 Development of the Registration System

The particular dimension of regulation which is the focus of the dissertation's case study is federal pesticide registration.³⁶ The roots of the regulatory regime

³⁶ Registration is one form of regulation. It refers to a system of pre-market clearance, where regulated products must satisfy prescribed standards before they can be sold and used. In Canada pesticides are also affected by a wider net of regulation. The current situation at the federal level is described below at note 67.

subject to review in 1988-92 were part and parcel of the environment in which choices about the mode for regulation were made by the Pesticide Registration Review Team and the federal government. The following discussion shows that, over the course of a century, there was remarkable transformation in both the logic of registration and the power structure of the pesticide registration community.

In the late years of the 19th century farmers in Canada, like their counterparts around the globe, relied on homemade brews of toxic chemicals to protect their crops from weeds and insects. Unbelievable as it sounds today, the most popular mixtures - such as Paris green, other arsenates of lead and copper and bluestone - were included in the listings of the British Pharmacopoeia, the Bible of medicines and preparations used by physicians, druggists and veterinarians. These primitive pest control products were considered to be no different than any other poison and raised the same concerns about safety. The prevailing wisdom was that all poisons had to be ingested - either directly in their pure form, or indirectly on food - in order to be harmful.

The regulatory solutions open to government were constrained by the Constitution Act, 1867. As in so many other instances, the Act did not explicitly address poisons. The right of provinces under s. 92 to legislate over property and civil rights and matters of a merely local or private nature gave them some claim to the area. But there was also reason to believe that the federal government was entitled to take steps to control poisons in light of its s. 91 authority over trade and

commerce and the peace, order and good government clause. The fact s. 95 created concurrent power over agriculture muddled the water further.

Against the backdrop of this tangled web of constitutional uncertainty both the federal government and the provinces eked out roles regulating poisons, including those used for agricultural purposes. What distinguished the respective regulatory regimes - and legitimized them under the constitution - was the type of harm sought to be prevented.³⁷ The provinces tackled poisoning due to direct ingestion, by regulating access to recognized poisons. The Ontario model was copied in other jurisdictions: under the province's Pharmacy Act, only registered pharmacists were authorized to sell the poisons farmers used for crop protection.³⁸

³⁷ Constitutional authority over what are now referred to as pesticides has yet to be authoritatively decided by the courts. The current division of regulatory responsibility, with the federal government controlling registration, classification and labelling and the provinces controlling actual use, has developed as a matter of practice and echoes the early patterns of government intervention in the area. The federal and provincial regulatory regimes are closely coordinated; for instance, provincially-licensed pest control operators can only apply products that satisfy federal registration requirements.

³⁸ See The Pharmacy Act, R.S.O. 1877, c. 145. Schedule A products, including arsenic and arsenic compounds, were deemed by s. 25 to be poisons within the meaning of the Act and therefore could only be sold by registered pharmacists. Additional conditions applied to the sale of poisons; for instance, pharmacists had to keep detailed records of all sales (including the purchaser's name and the purpose for which the poison was purchased) and were prohibited from selling poisons to anyone other than a "known" person, or an unknown person who the seller had been introduced to by a person known to him (see s. 27).

At the federal level, intervention was aimed at indirect ingestion. The Adulteration of Food Act,³⁹ assented to by Parliament in April 1884, established the first regulatory system for poisons and ingredients which might render food injurious to the health of people consuming it. The legislation included a general prohibition against selling food products that qualified as adulterated. For farmers, this meant that their crops had to be relatively free of residues from the poison compounds applied during or after the growing season. The regulatory system was presided over by the Department of Inland Revenue, although it consisted primarily of a very few chemists who analyzed samples collected from time-to-time by inspectors more concerned with weights and measures and tax revenues.

With passage of the Food and Drugs Act⁴⁰ (FDA) in 1920 this rudimentary regulatory system underwent minor alterations. Responsibility for the system was transferred to the new Department of National Health and Welfare. In addition, the definition of adulteration was broadened to cover cases where food (or drugs) failed to meet quality standards (i.e. for purity and strength). The statute gave the Governor-in-Council authority to prescribe these standards and to set limits on permissible variability. These changes had very little practical effect for farmers. The most significant development was that the government was more explicit about the levels of poisonous chemicals that could remain on food crops when they left the farm-gate.

³⁹ S.C. 47 Vict. 1884, c. 34.

⁴⁰ S.C. 10-11 George V 1919-20 (2d Sess.), c. 27.

The first legislation recognizing agricultural poisons as an independent matter for federal regulation distinct from the general category of poisons regulated by Health and Welfare was passed by Parliament in 1927.⁴¹ With more sophisticated chemical compounds gradually coming into commercial use, farmers were faced with a booming community of charlatans and "snake-oil" pedlars selling products whose effectiveness was often highly questionable, or that were toxic to much more than target pests. As the Minister of Agriculture, the Honourable W.R. Motherwell, humourously put it: "Some of the poisons that have been on the market in the past are, it is claimed, more conducive to fattening the gophers than killing them."⁴² Fruit and potato growers across Canada lobbied the Mackenzie King government for close to four years for legislation that would protect them from the fledgling industry's misrepresentations. The result of their campaign was the Agricultural Pests' Control Act⁴³ (APCA), which introduced the concept of compulsory registration.

The APCA's passage through Parliament in April 1927 exposed the early politics of pesticide regulation in Canada. The legislation created what today would be called a consumer protection regime, for farmers. The underlying rationale for compulsory registration, the Minister of Agriculture explained, was that it would

⁴¹ It is important to note that the new legislation did not stop the chemicals used in crop protection from being implicated in food safety regulation. The residues of agricultural poisons continued to be regulated under the FDA.

⁴² House of Commons Debates, April 1, 1927.

⁴³ S.C. 17 George V 1926-27, c. 40.

"safeguard the quality [of the chemicals used by farmers], particularly of the active ingredients."⁴⁴ It was also significant, however, that the APCA was originally introduced into the House as the Agricultural Economic Poisons Act. Under heavy prodding from trade and commerce interests, the Senate approved a "comparatively unimportant"⁴⁵ amendment (later concurred in by the House) which changed the name to the Agricultural Pests' Control Act. "Pest control" was a more innocuous term than "economic poison" and also gave official recognition to a budding industry.⁴⁶

The APCA offered protection to agricultural producers through what was at the time a relatively comprehensive regulatory system. Given the circumstances precipitating government intervention and the fact there was not yet a consumer protection portfolio, it was probably logical that the Minister of Agriculture rather than the Minister of Health and Welfare assumed responsibility for the system.⁴⁷

⁴⁴ House of Commons Debates, April 8, 1927.

⁴⁵ The Minister of Agriculture, House of Commons Debates, April 13, 1927.

⁴⁶ The term "economic poison" may also have referred only to the chemicals we know as insecticides.

⁴⁷ This point is made by Jill A. Browne in her Pesticide Regulation in Canada: The Federal Registration Process and Its Development Since 1927 (Edmonton: Environmental Law Centre, Alberta Law Foundation, 1987), p. 5. However, looking at the history of the Department of Agriculture as J.E. Hodgetts does in his The Canadian Public Service, pp. 99-100, there are two other complementary explanations. First, the APCA's assignment of regulatory responsibility reinforced the post-1886 pattern of the Minister and Department of Agriculture finally assuming duties genuinely related to fostering agriculture. Prior to this time, the Department "was concerned with almost everything but agriculture." (Hodgetts, p. 99). Giving responsibility for an economically-oriented

The Act gave the Minister the power to regulate the composition, packaging and labelling of all brands of agricultural poisons imported, manufactured, advertised and sold in Canada. An "agricultural poison" was any substance or mixture of substances represented as a means of preventing, destroying, repelling or mitigating fungi, weeds, insects, rodents, or any other plant or animal disease. The fundamental requirement of the Act was that a brand of agricultural poison could not be sold in Canada until it had been registered with the Minister of Agriculture.⁴⁸

Registration was a straightforward process. Anyone wanting to manufacture, import or sell a brand of agricultural poison simply had to provide the Minister with basic business information, disclose the poison's composition and guarantee that it contained the promised amount of active ingredient. The Minister could refuse to register a brand on four grounds: its name misled the purchaser about its composition or method of preparation, it was "approximately the same"⁴⁹ as another brand already registered by the same manufacturer, it was unsuited for the purpose for

regulatory programme to the Minister of Agriculture rather than the Minister of Health was also in line with the increasing differentiation of agriculture and health functions which had begun in 1919, with the creation of a free-standing Department of Health. Agriculture's early involvement in the area of (public) health was the natural result of its dominant activity between 1867 and 1892, namely immigration policy.

⁴⁸ It was consistent with the trade and commerce orientation of the Act that it did not regulate agricultural poisons directly, but rather their brands or trade names. Records of the debate in the House of Commons on April 1, 1927 regarding the upcoming Bill C-257 suggest that the government had originally intended another scheme: compulsory registration of vendors.

⁴⁹ Section 5(b).

which it was sold or represented, or it was "generally detrimental or seriously injurious to vegetation (except weeds), domestic animals or public health when used according to directions".⁵⁰ In the latter case, the terms "generally detrimental" and "seriously injurious" were used to screen out exceptionally toxic products. Once granted, a brand registration was valid until January 1st of the following year and was eligible for renewal every year thereafter. The registration fee was set at \$20.

Chemical analysis did not figure very prominently in this scheme. Some sporadic testing of product effectiveness was done on the Minister's behalf by "official analysts" already employed in the Department. These analysts also reviewed samples of agricultural poisons which were suspected by purchasers of not complying with the composition registered with the Minister and identified on the product's label. The low priority given to testing was a key reason why the total annual budget for the registration system was \$5,000.⁵¹

In the next ten or so years over 500 brands of agricultural poisons were registered for use in Canada⁵². A few registrations were awarded to manufacturers. More often, however, registrants were farmers who concocted mixtures for their own purposes and wanted to be able to generate a small secondary income by selling them

⁵⁰ Section 5(d).

⁵¹ House of Commons Debates, February 14, 1928.

⁵² House of Commons Debates, March 21, 1939.

in the community. The grassroot nature of the pest control trade was confirmed when policy-makers learned that the \$20 registration fee made it uneconomic for many applicants to register their products because they expected to sell less than \$20 worth of produce every year. At decade's end "a nice little army" of 48-50 inspectors was responsible for enforcing the APCA.⁵³

Chemically more complex products for new purposes came onto the market in the Depression years. Combined with instability in agricultural markets, this created a situation in which the federal government, farmers (especially fruit growers), chemical manufacturers and the leading pharmaceutical associations agreed that the registration system required updating. The APCA was amended in the spring of 1939.

The fundamental purpose of the registration system remained the same under the amendments introduced by Agriculture Minister James G. Gardiner. Other aspects of the regulatory regime nonetheless changed significantly. The scope of registration was extended in two respects: to cover substances that not only prevented, destroyed, repelled or mitigated pests, but also controlled them; and to cover non-agricultural uses (e.g. in industry and households). Bacterial organisms and viruses were specifically added to the list of target pests. Removal of all references in the Act to

⁵³ The Honourable H.H. Stevens speaking in the House of Commons Debates, March 21, 1939.

agricultural poisons and a new title - the Pest Control Products Act⁵⁴ (PCPA) - completed the transition to a regulatory regime for products that in general terms controlled pests. For applicants, the key development was that the PCPA required more detailed disclosure of information about the composition, purposes and uses of their products and guarantees as to their qualities, in particular their strength and effectiveness.

Despite these changes, there was a critical constant in the federal government's approach to registering pesticides. This was underlying faith that the chemical mixtures applied by farmers and others were magic bullets. As debate in the House of Commons made clear, the purpose of the 1939 PCPA was not to restrict access to pest control products that were currently available or yet to be developed.⁵⁵ The Minister of Agriculture, for one, trusted farmers to know what control products they needed and what effects they had, provided that the preparations continued to meet the standards set in provincial pharmacy legislation.⁵⁶ A long-time observer of pesticide registration describes the prevailing philosophy in this way: "If the chemical worked, and didn't kill the applicator it was OK to use."⁵⁷

⁵⁴ 3 George VI, c. 21 (assented to May 2, 1939).

⁵⁵ In fact, it is reasonable to argue that this kind of purpose would have had dubious constitutional validity from the federal government's point of view. See the discussion earlier in the chapter.

⁵⁶ House of Commons Debates, March 21, 1939.

⁵⁷ Frank J. Cedar, "Chemicals in the Public Domain: A Perspective Over the Last 40 Years," Chemistry in Canada, 35:11 (Nov. 1983), pp. 12-14, at p. 13.

For the next 30 years there were only incremental adjustments in pesticide registration. Against the backdrop of improved knowledge of toxicology, two issues came to dominate: the extent to which the safety of control products should be questioned and who should bear the onus for demonstrating product effectiveness and, to a lesser degree, safety. Policy-makers and regulatory officials addressed the issues within the bounds of the existing registration system.

Consider the detailed pest control products regulations promulgated under s. 12 of the PCPA in January 1949. These regulations were much heralded, partly because applicants were for the first time required to submit "experimental evidence from a recognized institution to support [their] representations as to the usefulness, effectiveness and safety of the product."⁵⁸ This tightening of the regulatory requirements was more apparent than real, however. Manufacturers only had to represent that their products were safe. The validity of the scientific studies they submitted was never challenged by regulators.

The substantive requirements for registration were revised again in December 1954, again under the direction of Minister Gardiner. Section 3 of the new regulations required applicants to submit "evidence acceptable to the Minister as to the practical effectiveness and safety of the product" and "protocols of experiments establishing the comparative mammalian toxicity of any new material contained in the

⁵⁸ Section 5(3).

product" in support of a first-time registration.⁵⁹ In some respects this signalled a more scientific approach to both product effectiveness and safety; manufacturers' representations certainly would no longer be sufficient to justify registration. Browne maintains that this outward change in the registration requirements did not, however, substantially affect departmental policy.⁶⁰ The 1954 regulations were perhaps more noteworthy because they referred to "pesticides" rather than "pest control products".

Nor did the registration system change very much from the point of view of administration in these years. The entire process was apparently run by a single official and it typically took two to three months to have a product registered for the first time. As one industry representative recalls: "Certainly registration was required but it was very simple and streamlined."⁶¹

The first of two fatal blows to the old approach to regulating and registering pesticides in Canada was delivered with the 1960s. The thalidomide tragedy and Silent Spring together raised unprecedented world-wide awareness of the risks chemicals posed to human health and safety and environmental quality. Governments in turn came under attack for failing to adequately protect their citizens against these previously hidden risks. In Canada, two major targets in the ensuing public

⁵⁹ Sections 3(a) and 3(b).

⁶⁰ Browne, Pesticide Regulation in Canada, p. 11.

⁶¹ From an interview with Jack Elliott, former chairman of the Crop Protection Institute of Canada, 1957, in CPIC's Newsletter, vol. 3, Sept. 1992, p. 5.

controversy were federal food and drug policy. The Diefenbaker government's creation of a Special House of Commons Committee on Food and Drugs in December 1962 recognized that the legislative and regulatory frameworks in these areas were indeed suspect.

The Food and Drugs Committee did not have immediate repercussions for pesticide registration. One-half of its mandate was indirectly relevant, however: to report on the hazards posed by food contaminated through the use of chemicals to kill weeds, insects and other pests.⁶² The close link drawn between pesticides and food safety recalled the origins of federal government intervention in the pesticide area 75 years earlier. Repeated attempts to have the Committee broaden its perspective on pesticides to include their health and environmental effects failed. Furthermore, the pesticide-relevant half of the Committee's mandate was to a large degree swamped by public fixation on drug safety.

It was in the longer-term that the Special Committee on Food and Drugs had its primary influence on the reform of pesticide registration. The underlying message of the Committee's report was that chemical products, while often beneficial, were also potentially dangerous to humans and the environment and that the federal government should consequently play an active role in controlling their use. Although

⁶² The Committee was also mandated to report on the law and administrative practices controlling the introduction, marketing and use of drugs in Canada.

couched in fairly general language, this new paradigm quite naturally spilled over into policy areas concerned with specific chemical products, such as pesticides. This created an anomaly. The existing system for registering pesticides had been built around the two basic ideas that pesticides were essentially safe if used as directed, and that the principal kind of protection needed was for farmers against ineffective products. Neither of these was consistent with the new policy paradigm. Refounding the regulatory framework required a major overhaul of the PCPA.

Finally, the Food and Drugs Committee hearings opened a window on a registration process that had become infinitely more complex in a very short time. In a major development, several departments now informally assisted the Department of Agriculture in making registration decisions. These departments reviewed the results of studies on product effectiveness and safety that related to their specific mandates and areas of expertise; the Department of Health and Welfare, for example, assessed studies on food residues and occupational hazards, and Northern Affairs and National Resources examined those concerned with wildlife. The Departments of Fisheries, Forestry and Defence also acted as advisors. By the mid 1960s, the Minister of Agriculture was receiving close to 3,000 applications for registration each year.

The legislative response to the December 1963 recommendations of the Food and Drugs Committee as they affected pesticides came almost exactly five years later. In one of the first Trudeau government initiatives, the Minister of Agriculture H.A.

Olson introduced a three-part package of reforms. The long-standing tradition of seeing pesticides in the first instance as a farm issue continued, despite the 1939 amendments. Under the Pesticide Residue Compensation Act,⁶³ agricultural producers who used registered pesticides as directed by the manufacturer but nevertheless found themselves with crops condemned for sale because of unacceptably high levels of chemical residues were eligible for financial compensation. Amendments to the Animal Contagious Diseases Act⁶⁴ provided for financial compensation in analogous circumstances.

The centrepiece of Olson's reforms was a new Pest Control Products Act.⁶⁵ The Minister contended that the legislation was "framed in the same general context"⁶⁶ as the old. In retrospect, however, it paved the way for a dramatic modernization of pesticide registration in Canada.⁶⁷

⁶³ R.S.C. 1985, c. P-10.

⁶⁴ R.S.C. 1970, c. A-13, which was subsequently replaced by the Animal Disease and Protection Act, R.S.C. 1985, c. A-11.

⁶⁵ R.S.C. 1985, c. P-9.

⁶⁶ House of Commons Debates, January 14, 1969.

⁶⁷ While the PCPA-based registration system is the central instrument by which the federal government regulates pesticides, it is important to note that the toxic effects of pesticide use are also federally-regulated through other legislation. The major statutes are: the Food and Drugs Act, R.S.C. 1985, c. F-27; the Ocean Dumping Control Act, R.S.C. 1985, c. O-2; the Canada Water Act, R.S.C. 1985, c. C-11; the Northern Inland Waters Act, R.S.C. 1985, c. N-25; the Arctic Waters Pollution Prevention Act, R.S.C. 1985, c. A-12; the Transportation of Dangerous Goods Act, R.S.C. 1985, c. T-19; the Fisheries Act, R.S.C. 1985, c. F-14; the Migratory Birds Convention Act, R.S.C. 1985, c. M-7; and, as of 1989, the Canadian Environmental Protection Act, S.C. 1989, c. C-

The 1969 PCPA was grounded in the modern view that chemical pesticides had dual qualities. As the Minister explained:

[P]esticides have a great deal to do with the high standard of living enjoyed by the average Canadian today. Not only do they enable farmers to produce greater quantities of high quality food more economically, but they also make it possible for all of us to live, work, and play in considerable more comfort than did our forefathers [...] But pesticides have dual personalities. It is true that they bring us untold benefits, but they can also get us into trouble.⁶⁸

The trouble the Minister referred to was mishandling and careless use leading to food contamination, crop damage, as well as human and animal injury.⁶⁹ For other members of the House, pesticides were inherently dangerous to "the quality of our environment,"⁷⁰ including fish, seagulls and the unborn - regardless of how carefully they were used. There was nevertheless general agreement amongst legislators that the potential of chemical pesticides for both harm and good called for "a broader authority for regulation than in the past."⁷¹

15.3.

⁶⁸ House of Commons Debates, January 14, 1969.

⁶⁹ Ibid.

⁷⁰ P.V. Noble, Member of Parliament for Grey-Simcoe, speaking in the House of Commons Debates, January 14, 1969.

⁷¹ The Honourable H.A. Olson speaking in the House of Commons Debates, January 14, 1969.

The redesigned PCPA extended the scope of regulation in several directions. The basic requirement remained that all pesticides imported into or sold in Canada had to be registered by the Minister of Agriculture. To this were added certain restrictions on the export and interprovincial movement of control products. The 1969 regulatory regime covered not only the composition, packaging and labelling of pesticides, but also their manufacture, storage, distribution, use and advertising and the standards for product efficacy and safety. In a highly controversial break from the past, authority to prescribe regulations in these areas was given to the Governor-in-Council rather than the Minister.⁷² Finally, "control products" other than true pesticides were caught by the Act. These included substances which were added to pesticidal compounds to enhance or modify their physical and chemical properties (e.g. emulsifiers, stickers and stabilizers) and plant growth modifiers (e.g. sprout inhibitors).

⁷² In this regard public debate over the PCPA, 1969 anticipated the central dilemmas of the modern regulatory state. One of the major concerns about the Act was the power it gave to Cabinet to regulate by order-in-council because this was considered to lead to "abuses of the rights given to government" (A.P. Gleave, Member for Saskatoon-Biggar in the House of Commons Debates, January 14, 1969). For similar reasons there was also strident opposition to the breadth of discretion the Act gave to the bureaucracy, for instance to inspect manufacturing premises and control products and to force the withdrawal of products from the market. The problems of delegated legislation and in particular the right of those affected by regulatory decision-making to seek recourse were the source of protracted conflict between the Senate and House of Commons over the PCPA in the spring of 1969.

The PCPA of 1969 was also a landmark because it formally recognized an additional interest in pesticide registration. As the Minister of Agriculture put it:

[T]his new legislation will continue to give effective service to the agricultural industry while at the same time providing greatly improved means of protecting the public interest.⁷³

The shift toward greater emphasis on the public interest dimensions of pesticide registration was manifested in several places. The substantive provisions of the legislation that tightened controls over the labelling, advertising and packaging of registered products were intended to ensure safe use and to protect users - consumers, farmers and others - from deceptive marketing. Another certain indicator was that agricultural producers and the chemical industry were unable to exert their customary influence over the reform process once it entered the public arena. In fact, representatives from the Canadian Agricultural Chemicals Association (now, the Crop Protection Institute of Canada) and the Canadian Manufacturers of Chemical Specialties Association were invited to participate in the House of Commons Committee on Agriculture's hearings on the PCPA only after protracted negotiations amongst Committee members.⁷⁴ These oldline interests were successful in seeing only one of their major concerns addressed: insertion in the legislation of a right to a hearing into a decision by the Minister of Agriculture to refuse to register a control

⁷³ House of Commons Debates, January 14, 1969.

⁷⁴ This is reported by H.W. Danforth, a member of the Committee, in debate in the House on third reading of Bill C-157, February 21, 1969.

product. All of the other witnesses appearing before the Committee were from government.

The registration system authorized by the PCPA took shape when regulations were promulgated in 1972, three years after the legislation had received royal assent. There were two fundamental criteria for registration: efficacy and safety. Applicants were required to submit evidence that their control product had "merit or value for the purposes claimed" and did not lead to "an unacceptable risk of harm to (i) things on or in relation to which the control product [was] intended to be used, or (ii) public health, plants, animals or the environment".⁷⁵ The regulations stipulated, in s. 9, the kinds of evidence upon which merit, value and safety might be assessed by the Minister of Agriculture. These included the results of scientific investigations regarding the pesticide's effectiveness for intended uses; its toxicity to non-target organisms, including humans; the degree of persistence, retention and movement of the product and its residues; the risks of occupational exposure for persons involved in the manufacture, storage, distribution and use of the pesticide; and suitable methods for disposal.

The regulations provided for an array of decisions by the Minister of Agriculture. The Minister could award a registration if he was satisfied that a product had value and merit and did not pose an unacceptable risk of harm. If he was not, he

⁷⁵ Pest Control Products Regulations, C.R.C. 1978, c. 1253, section 18.

could refuse to register it. The alternative of a temporary registration was available in the case of products necessary for emergency control purposes, or if the Minister was leaning toward registration but wanted to see additional scientific or technical information submitted by the applicant. For products already registered, the Minister was entitled to cancel, suspend or refuse to renew registration if, based on information available to him, he determined that the product no longer passed the merit-value-safety test.

The Plant Products Division (PPD) of Agriculture Canada was responsible for day-to-day administration of the registration process. It evaluated and assessed all of the applications submitted to the Minister under the Act. As had begun to happen in the early 1960s, the PPD sought assistance from other federal departments with expertise in the pesticide area. Principal amongst its advisors were groups at Health and Welfare, which evaluated studies on toxicology and occupational exposure, and at Environment Canada, which examined data on persistence and bioaccumulation and potential impacts for birds and other wildlife. Fisheries and Oceans supplied information about the anticipated effects of a control product on inland and estuarine fish habitats. When the PPD received applications concerning pesticides for forest use, it consulted with the federal officials then responsible for forestry matters.⁷⁶

⁷⁶ Responsibility for forestry matters has been tossed from one federal department to another since the 1950s. See Wyn P. Grant, "Forestry and Forestry Products," in Coleman and Skogstad, Policy Communities and Public Policy in Canada, pp. 118-140, at p. 123, for a description.

The ad hoc development of working relationships with other federal departments was a practical response by the Plant Products Division to the difficulty of making credible decisions about the value, merit and safety of modern pesticides with limited resources and considerable scientific uncertainty. Formal responsibility for registration decisions was of course vested in the Minister of Agriculture. The other departments could advise or make recommendations about the acceptability of a particular pesticide formulation. In the end, however, it was the Minister of Agriculture who was accountable to Parliament for the final decision.

The second shock to Canada's old registration system was the discovery in 1976-77 that many studies conducted at Industrial Bio-Test Laboratories and used to support the registration of pesticides in Canada and the United States were fraudulent.⁷⁷ Regulatory authorities in the two countries declared the studies invalid and ordered registrants to submit new scientific data. The IBT scandal cemented the post-1969 reorientation of pesticide regulation. It also put extraordinary strain on the still-evolving registration process.

⁷⁷ Industrial Bio-Test Laboratories was the largest independent producer of toxicology studies at the time. Hoberg reports that Canadian and American regulatory authorities determined after a five-year review that "only about 10% of the over 2000 IBT studies which had been submitted in support of pesticide registration were valid" ("Reaganism, Pluralism, and the Politics of Pesticide Regulation, p. 265). In 1983, three senior IBT officials were convicted by a U.S. court of routinely fabricating test results. See Keith Schneider, "Faking It," The Amicus J., 4 (spring 1983), pp. 14-26.

The most serious blow to the registration system came from the scientific invalidity of studies regarding control product toxicology. This fuelled suspicions - amongst politicians, regulators and the general public - that many pesticides in use in Canada were considerably less safe to humans and the environment than previously alleged by registrants. The fears were especially acute about products that had long-time registrations and therefore had been held to lower safety standards at the outset. The end result was an unprecedented crisis of confidence in the registration system (and not incidentally in the pesticide industry).

The response from the Minister of Agriculture was to order replacement studies for 113 affected control products. This had repercussions for management of the registration system. Officials in Agriculture's Plant Products Division had to process a wave of re-submissions as the results of replacement studies became available over the next few years. Furthermore, the workload increased qualitatively. Affected products had to meet the 1972 value-merit-safety standard as defined by current toxicological knowledge in order to retain their registration. This necessitated more sophisticated audits and evaluations by PPD staff. Workload pressures for the PPD reverberated in the other federal advisory departments, thereby taxing the system of administrative relations.

The IBT events brought to the forefront what Salter later called "the politics of assessment" inherent to the post-1972 registration process. As before, the registration

system operated in a political environment. The distinguishing characteristic of the post-1972 system was that registration was no longer the private preserve of the Minister of Agriculture but, for all practical purposes, was shared with the Minister of Health and Welfare. This was a consequence of the system of administrative relations Agriculture had cultivated to help it discharge its registration responsibilities, combined with the strength of Health and Welfare's conviction that it had a legitimate interest in registration decisions based on its expertise in toxicological evaluation and statutory mandate to protect the health of Canadians. Events surrounding re-evaluation of one of the IBT pesticides, captan, gave the first public glimpse into the problems this development posed for the registration system.

The central dilemma was the status of advice received from the Department of Health and Welfare.⁷⁸ How could the system produce regulatory decisions when two departments with different mandates and priorities and dominant policy paradigms were legitimately involved, but one minister was held legally accountable? In the case of captan, Health and Welfare reviewed the scientific evidence, concluded that the fungicide - which was suspected of being both carcinogenic and teratogenic - posed an unacceptable risk of harm. On this basis the Department recommended to the Minister of Agriculture that its registration be cancelled for many agricultural and most home uses. Officials at Agriculture, however, were apparently not persuaded

⁷⁸ The captan controversy is examined in Liora Salter, "Observations on the Politics of Assessments, The Captan Case," CPP, 11 (1985), pp. 64-76.

that deregistration was the answer. Whether or not they agreed with Health and Welfare's verdict on the unacceptability of any risk, evaluators at Agriculture were also obliged by the PCPA regulations to consider captan's merit and value. Amongst the factors deemed relevant were the financial consequences of a ban or restricted use for agricultural producers and the pesticide industry in Canada, as well as the likely outcome of re-evaluation in the United States.⁷⁹ To help resolve the ensuing impasse, the Minister of Agriculture established a consultative committee to recommend appropriate regulatory action in response to Health and Welfare's advice.

The dispute between Agriculture and Health and Welfare, as uncovered by the committee, was primarily over toxicological questions and who should evaluate them. Health and Welfare's informal position was not only that it should have de facto jurisdiction over this aspect of registration, but implicitly that toxicological considerations should weigh relatively more heavily in regulatory decision-making. Two parties appearing before the committee took a more radical position. In a harbinger of what was to come in the 1980s, the Canadian Environmental Law Association and Pollution Probe recommended that legal jurisdiction over the registration of pesticides be transferred from the Minister of Agriculture to the Minister of Health and Welfare and the Minister of the Environment.

⁷⁹ This is reported in Salter's account of the captan re-evaluation. See ibid.

3.0 THE 1980s: TOWARD A REFORMED PESTICIDE REGISTRATION SYSTEM

The registration system defined in the 1972 pest control products regulations continued in force in the 1980s. Early in the decade pesticide registration was part of the inspection and regulation activities of Agriculture Canada's agri-food program. Registration-related operating and capital expenditures in the Department totalled just under \$2.8-million a year.⁸⁰ The Plant Products Division annually reviewed over 3,500 applications; non-renewal submissions totalled on average 2,360⁸¹, 2% of which could not be fully processed and therefore started to accumulate in a backlog. The Department's expenditures also covered 7,000 inspections authorized by the PCPA and analysis of 1,450 pesticide samples.

Rather than improving, the climate of discontent fostered by the IBT affair worsened. Section 3.1 explains that the registration system was almost immediately targetted by several new publics who wanted to see regulators forced to pay more attention to the health and environmental risks of pesticide use in making decisions under the PCPA. Agriculture Canada took a number of steps, described in Section 3.2, to rescue the registration system from its critics. Regardless, on the eve of the

⁸⁰ Canada, 1982-83 Estimates, Part 3: Agriculture Canada.

⁸¹ This figure includes applications for minor uses and research permits and first-time registrations. See Agriculture Canada, Pesticides Directorate, Review Paper: Pesticide Registration in Canada, September 1989, p. 7.

Minister of Agriculture's announcement of the pesticide registration review in the fall of 1988, the regulatory community had solidified into identifiable stakeholder groups, each with a distinctive interest in pesticide registration and demanding regulatory solutions to restore the integrity of the registration system. One of the dominant messages - that the existing Minister of Agriculture-centered mode for regulation no longer had sacred status - is particularly salient for the dissertation's case study.

3.1 Pesticide Registration Besieged

The central factor galvanizing diverse interests behind the cause of reform was the widespread view that federal pesticide registration constituted an outstanding case of regulatory failure. Virtually no dimension of the existing system escaped censure. Environmentalists and public health advocates launched the first assaults, challenging the basic philosophy of Canada's approach to pesticide regulation and arguing that registration should be recast as social regulation. Over the course of a few short years agricultural producers, the pesticide and forestry industries, labour groups and others joined in the campaign for reform for radically different reasons.

Dissatisfaction with the status quo was expressed in many ways. Advisory committees, academics and special interest groups published scathing attacks on the registration system. Producer groups and pesticide manufacturers discussed their

grievances directly with regulatory officials. They also quietly lobbied the Minister of Agriculture. Another clear manifestation of stakeholders' frustration was resort to bypassing the regulatory system. This was particularly true for farmers. Intentional use of unregistered pesticides was in their view increasingly justified by economics, the only alternative to non-compliance being huge crop losses that threatened their livelihoods.⁸²

The principal targets of criticism were equally diverse. They were procedural as well as substantive. They ranged from the speed of regulatory decision-making and the adequacy of pre-registration testing requirements (especially with regard to safety) to regulators' interpretations of "unacceptable risk" and the status of particular

⁸² Interview. This phenomenon of non-compliance is also reported in Dean and Fox, pp. 10-11.

interests in the regulatory process.⁸³ Concerns were also voiced about the effects of the registration system, for instance for the competitiveness of Canadian agriculture.

The existing organizational arrangement for registration was singled out as one of the central culprits in regulatory failure. As evidence, 13 of the major reports written on federal pesticide registration between 1981 and 1988 made specific recommendations regarding the decision-making process and legislative authority.⁸⁴

There were four inter-related accusations. Some observers pointed to the failure of advisory departments to play appropriate roles in support of pesticide registration. Agriculture's advisors, known as the core departments, were deemed to be either too active, or too passive. The related claim was made that the system of administrative relations had already been stretched to the limit and lacked sufficient

⁸³ Some of the leading reports which touched on these themes were: Ross H. Hall, A New Approach to Pest Control in Canada (Ottawa: Canadian Environmental Advisory Council, July 1981); Liora Salter and William Leiss, Consultation in the Assessment and Registration of Pesticides. Final Report and Recommendations, Simon Fraser University, March 31, 1984; Canada. Task Force on Program Review. Study Team on Regulatory Programs. Regulatory Programs (Ottawa: Minister of Supply and Services, 1986), Chapter 2, "Review of Regulatory Programs," which includes an analysis of the inspection and protection of crops, livestock and farm input supplies program of Agriculture Canada, at pp. 57-62; Wade MacLauchlan, A Legal Analysis of the Canadian Pesticide Registration System, a report prepared for the Pest Management Advisory Board, 1986; Toby Vigod and J.F. Castrelli, Pesticides in Canada: An Examination of Federal Law and Policy, a study paper prepared for the Protection of Life Series (Ottawa: Law Reform Commission of Canada, 1987); House of Commons Standing Committee on Agriculture, Farm Input Costs, a 1987 report to the House of Commons; and Auditor General of Canada, Report to the House of Commons, 1988 (Ottawa: Minister of Supply and Services, 1988), Chapter 8, an audit of Agriculture Canada's Food Production and Inspection Branch.

⁸⁴ Pesticides Directorate report, February 1989.

resources to successfully cope with a still-increasing workload. Other critics submitted that the current informal distribution of responsibility was a barrier to effective coordination across federal departments involved in the pesticide area, that there needed to be a single federal voice. This latter argument was exploited by environmentalists whose agenda was to reform federal pesticide policy rather than simply registration. In point of fact these kinds of problems were a symptom of the registration process as then designed and were not necessarily exclusive to a particular assignment of regulatory authority. For obvious reasons, however, Agriculture Canada took the brunt of the criticism.

A fourth avenue of assault was different. Behind a number of proposals for modifying the existing mode for regulation was the belief that the Department of Agriculture was biased in favour of pesticides. The charge was two-fold: first, that an inherent contradiction between Agriculture's responsibilities under various statutes to promote an economically viable farm sector and its PCPA responsibility to ensure the safety of pesticides was regularly resolved in favour of the imperatives of maximizing production⁸⁵; and, second, that the regulatory process was a closed shop dominated

⁸⁵ In a recent report for the Science Council of Canada Project on Sustainable Agriculture, Grace Skogstad writes: "Few would dispute that Canadian agricultural policies have emphasized production and marketing - that is, the economic sustainability of Canada's farmers - to the neglect of social and environmental objectives. The production-driven and market-oriented strategy has reflected a consensus of both levels of government that the international competitiveness of Canadian producers (and thus individual producers' economic livelihood) could best be promoted by specialized and large-scale production. To that end, governments instituted credit policies, income safety nets, and transportation subsidies to provide farmers with assistance and incentives to

by Agriculture officials, producers and, to a lesser extent, the pesticide industry.

Proponents of this view maintained that the existing locus of regulatory authority was therefore the principal reason why the registration system delivered less than optimal amounts of safety, in individual registration decisions as well in a global sense.

For an outside observer, this line of attack was problematic. Only the Minister and Department of Agriculture were specifically accused of being biased regulators. This could be explained by the fact that the argument's architects were safety-minded environmental, public health, labour and consumer interests. But the solutions that naturally flowed from their recommendations ironically assumed another sort of bias, that other ministers and departments would make registration decisions more consistent with their own goals and interests if given the chance.

In the end, three basic mode options were put on the table. The first was the Hall model for a pesticide super-agency.⁸⁶ Developed on behalf of the Canadian Environmental Advisory Council, this proposal called for an independent Pest Control Evaluation Commission (PCEC) made up of appointees from the three main departments involved in assessing pesticides (i.e. Agriculture, Health and Welfare and Environment). The Commission would have very broad statutory powers to make and

expand, mechanize, and specialize." See Grace Skogstad, Political Institutions and a Sustainable Agriculture (June 1991), p. 4.

⁸⁶ Hall, A New Approach to Pest Control.

implement regulatory decisions. Hall envisioned that PCEC's role would extend beyond registration, to coordinating and managing a new federal pesticide policy. The Hall report officially launched debate in the regulatory community on the mode issue when it was published in 1981.

Alternatively, the long-standing tradition of a department-based mode could be reworked. One option was to improve the existing Agriculture-centered arrangement. For the Canadian Council of Resource and Environment Ministers (CCREM), this meant reducing confusion about who made and advised on registration decisions.⁸⁷ Federal and provincial government officials, representatives of the private sector and university academics met to address this issue (and three others) at a groundbreaking CCREM-sponsored workshop on pesticides in 1982. The Council subsequently recommended that the advisory roles of the Departments of Health and Welfare, Environment and Fisheries and Oceans be given a higher profile, possibly by specifying them in the PCPA.

Support for a modified status quo also came from federal regulatory authorities. Environment Canada's Environmental Protection Service, for instance, conducted an in-house review of its role in the registration process in response to the

⁸⁷ CCREM, Pesticides Workshop Proceedings. There was very strong support for an improved status quo mode at this multi-stakeholder workshop: 33 of 41 participants wanted to keep authority for the PCPA with the Minister of Agriculture, and 35 approved raising the profiles of the advisory departments.

Hall report's charge that it was too passive. The solution, EPS argued, was not to move to an agency mode; instead, the Service should be allowed to achieve its registration-related objectives through improved access to qualified personnel and the introduction of standardized testing protocols.

The second option for a department-based mode was transferring responsibility for registration to another minister. The most frequently mentioned candidates were the Minister of Health and Welfare and the Minister of the Environment. The rationale for this kind of proposal, which was made by the Canadian Environmental Law Association and others,** was that changing the locus of decision-making responsibility to one of these ministers would guarantee that only pesticides that passed rigorous safety standards were registered for use in Canada.

The various mode proposals had two things in common. Members of the policy community tended to agree that at least three departments - Agriculture, Health and Welfare and Environment - had legitimate interests in pesticide registration given their statutory mandates. The controversy was over how each department should have input into registration decisions and the weight to be attached to their respective interests. The other similarity amongst the many proposals for reforming the mode

** For example, the Toronto Public Health Department in a 1982 report on captan and other IBT pesticides. The Hall report, however, specifically rejected giving regulatory responsibility for pesticides to the Minister of the Environment (see Hall, A New Approach to Pest Control).

for regulation was a failure to take serious account of the lessons from captan. The nuts-and-bolts of decision-making in the context of conflicting departmental assessments of a pesticide's merit, value and safety were ignored.

3.2 The Regulators' Response

The first issue regulators addressed was dissatisfaction with the role the core advisory departments were playing in pesticide registration. Two concerns were paramount: solidifying the status of advisors, and making the registration system more effective and easier to manage. The strategy chosen was to formally distribute responsibilities and entitlements using memoranda of understanding (MOU). After protracted negotiations, Agriculture signed agreements with Health and Welfare in 1982⁸⁹ and with Environment Canada in 1988⁹⁰.

Under the terms of the former agreement, the Minister of Health and Welfare assumed administrative responsibility for evaluating the potential risks of occupational

⁸⁹ The option of formally recognizing Health and Welfare's role in pesticide registration in the PCPA was discussed at the deputy minister-level in 1980, but was rejected. See Vigod and Castrelli, Pesticides in Canada, p. 48, footnote 268, which cites correspondence from Pamela A. McDougall, Deputy Minister, Health and Welfare Canada, to Geaten Lussier, Deputy Minister, Agriculture Canada, July 16, 1980.

⁹⁰ A draft memorandum of understanding between Agriculture and Environment was circulated for comment as early as December 1982.

and other types of exposure to pesticides and for ensuring that their use would not result in residues contravening the food and drug regulations. The Minister was also entitled to advise the Minister of Agriculture, based on these assessments, whether particular pesticides posed undue risks of harm. The Minister of Agriculture in turn agreed to give full consideration to any recommendation from the Minister of Health and Welfare concerning either registration, or new scientific findings on control product safety. Determinations about the acceptability of Health and Welfare-identified risks remained the exclusive responsibility of the Minister of Agriculture.

The agreement with Environment Canada was very similar. It acknowledged Environment's broad statutory mandate to preserve and enhance the natural environment and recognized its advisory role in pesticide regulation, especially its expertise in environmental risk assessment. The Minister of Agriculture promised to seek advice from the Minister of the Environment on, among other things, registration and refusal to register, changes to the regulatory framework and the development of regulatory policies and directives and also to give full consideration to Environment's recommendations regarding the acceptability of specific pesticide uses. The MOU ensured Environment Canada access to data: the Department was entitled to all data held by Agriculture which were necessary for the Department to complete its risk evaluations, and Agriculture was obliged to provide its advisor with any information that came to light of adverse environmental effects of pesticide use. Provision was also made for pre-decision discussions when the Minister of Agriculture intended to

make a registration-related decision under the PCPA that conflicted with Environment's advice. Finally, Environment Canada was free to release to the public risk assessments prepared by its officials.

The Department of Fisheries and Oceans also had leverage in the registration process because of increased awareness about the risks pesticides posed for water quality and fish habitats.⁹¹ While preliminary discussions were held with Agriculture on a possible MOU, they did not progress very far. This was mainly for resource reasons. DFO considered that it lacked the resources necessary to effectively carry out specific assessment and advisory functions in support of registration. As a result, departmental officials resisted buying into an MOU arrangement under which they would be held accountable, at least in an administrative sense. It was also true that DFO's terrain in evaluating the hazards of pesticide use could reasonably be subsumed under Environment's broader responsibilities for environmental risk assessment.

Where it was adopted, the MOU technique had the advantage of spelling out in fairly clear language the overall division of labour in the pesticide registration system. The downside, however, was that the agreements Agriculture signed with Health and Welfare and Environment did not actually usher in appreciable change in how the registration system operated. In the eyes of many regulatory officials, especially those

⁹¹ DFO was routinely advising on pesticide registrations, re-evaluations and requests for research permits as of the mid 1970s. See CCREM, Pesticides Workshop Proceedings, p. 101.

at the advisory departments, the MOUs mainly gave ex post facto approval to administrative practices already in effect. They skirted deep-seated structural problems.

The second major theme of reform was to restore public confidence in pesticide registration. This challenge fell squarely on the shoulders of the official regulator, the Department of Agriculture. A number of steps were consequently taken inside the Department. In the main, the plan was to make the Department's regulatory functions more visible. As reported in the mid 1980s:

A strong effort is being made to increase the visibility and impact of the Pesticide Program. The primary objectives are to modernize, streamline, and make more accountable the pesticide regulatory apparatus by enacting regulations that ensure the use of pest control products in Canada meets modern requirements of safety, merit and value. Government concerns about toxic chemicals and the risks, benefits and positive initiatives in this area must be made visible to the public.⁹²

The upgraded status of pesticide activities was symbolized by an almost three-fold increase⁹³ in operating and capital expenditures. By 1986-87, Agriculture's operating and capital spending in the area totalled \$8.0-million.⁹⁴

⁹² Agriculture Canada, Annual Report, 1986-87, p. 3 - 50.

⁹³ It should be noted, however, that the increase coincided with a reorganization of Agriculture's activity structure and therefore that the pesticide activity itself was redefined at this time.

⁹⁴ This figure includes registration and evaluation as well as other pesticide activities in the Department, such as information dissemination to the public, inspection/compliance and the Pest Management Advisory Board. See Canada, 1986-87 Estimates, Part 3: Agriculture Canada.

Departmental priorities shifted to achieve the objective of improved visibility. In addition to making Canadians more aware of the protection afforded them by the pesticide registration process, Agriculture announced that it was concentrating on the development of alternatives to agricultural and forestry chemical use and on encouraging sustainability in the agri-food and forestry resource bases. As for the pesticide activity itself, now budgetted over 120 PYs, program goals were adjusted in 1984 to emphasize health and safety as opposed to quality assurance, which had long been regulators' *raison d'être*. This coincided with grouping the pesticide program with the Department's newly-established freestanding inspection and regulation function.

The cornerstones of Agriculture's refocussing in the pesticide area were several important organizational changes and registration-complementary initiatives. Consider the policy level. As recommended in the Salter and Leiss report, the Minister of Agriculture created the Pest Management Advisory Board in July 1985 to provide advice on pesticide issues using a consultative approach with the regulatory community.⁹⁵ The Policy Branch which emerged from the Department's reorganization in 1987-88 assumed responsibility for evaluating the benefits of pesticide use. Finally, an inter-branch committee was set up under the leadership of

⁹⁵ See Hajo Versteeg, Chairman, Pest Management Advisory Board, "The Role of the Pest Management Advisory Board", a submission to the House of Commons Standing Committee on Environment and Forestry, May 17, 1988, which is reproduced in the Committee's Minutes of Proceedings and Evidence, Issue No. 31, May 17, 1988. The PMAB is also discussed in greater detail in Chapter 5.

the Food Production and Inspection Branch "to coordinate departmental pesticides policy development and implementation."⁹⁶

The most significant development, however, was the formation of a focal point for pesticide registration: the Pesticides Directorate (PD).⁹⁷ Located under the wing of the Food Production and Inspection Branch, the PD took over the product management/evaluation activities previously carried out by the Plant Products Division. It also entered uncharted waters which were overseen by an Information Secretariat and an Issues, Planning and Priorities Division. Over the course of the next couple of years the PD introduced a number of important improvements in the

⁹⁶ Agriculture Canada, Annual Report, 1987-88, p. 3 - 52.

⁹⁷ Most studies of Canada's pesticide registration system concentrate on the Pesticides Directorate (the group responsible for day-to-day administration of the PCPA) and the core advisory departments. Less well-known is the division of labour within the Department of Agriculture. In the period of interest in the dissertation, the PD carried out its PCPA duties with assistance from four other Agriculture Canada groups:

The Research Branch helped assess efficacy, performance and phytotoxicity. It also conducted field trials.

The Policy Branch evaluated applicants' benefit data (e.g. on the effects of product use on crop yields and overall quality of the food supply).

The Laboratory Services Division of the Food Inspection Directorate did the chemical analysis necessary for pre-registration product evaluations as well as for post-registration enforcement activities.

The regional offices of the Operations Directorate also had a role in the pesticide registration system. Each office had a regional pesticide officer as well as inspectors who liaised with provincial authorities, handled complaints and investigations, participated in the field compliance program and responded to inquiries about the registration system. The regional staff also facilitated the collection of benefit information for pre- and post-registration evaluations.

The essence of this internal division of labour remains relatively intact. However, the Pesticides Directorate was reorganized at the start of 1993.

registration system. Those receiving the highest praise from the policy community were a toll-free national pesticide call-in line, reduced turnaround times for submissions, greater access to pesticide-related information through CAPCO notes⁹⁸ and discussion and decision documents,⁹⁹ and periodic consultation with stakeholders on regulatory issues.

Regulators' initiatives did not silence the critics. On the contrary, they seemed to illustrate the limits of reforming the status quo. This was no where more apparent than amongst federal advisory departments. Even with memoranda of understanding, Health and Welfare and Environment considered that the registration system was "not entirely satisfactory".¹⁰⁰ Their complaints boiled down to concerns about control and influence, but also about developing and preserving reputations as effective regulators.¹⁰¹

⁹⁸ CAPCO, the Canadian Association of Pest Control Officers, is comprised of federal and provincial government officials involved in all aspects of pesticide registration, sale, use and disposal in Canada. The organization facilitates exchange of technical and regulatory information, undertakes studies on pesticide issues and disseminates information to user groups, other associations and the general public. CAPCO regularly publishes updates on regulatory initiatives concerning particular pesticides. Members of CAPCO participated in the 1988-92 federal pesticide registration review through their "home" organizations.

⁹⁹ Both kinds of documents are published by the Pesticides Directorate, Agriculture Canada. Discussion documents summarize the data reviewed on active ingredients. There is a 30-60 day period following publication for public comments. Decision documents summarize final regulatory decisions.

¹⁰⁰ Confidential interview.

¹⁰¹ Confidential interviews.

Both departments resented the fact that risk assessment activities played havoc with their overall ability to plan and set priorities. In this regard they saw themselves at the mercy of Agriculture and the pesticide industry. The departments also protested Agriculture's freedom - both legal and political - to interpret (and refuse) their advice once it was given. In Health and Welfare's case, there was an important counterpoint. This was that health was a trump card. Given Canadians' near-zero tolerance of health risks, Health and Welfare officials and many other members of the policy community believed that it would be impossible for political reasons for the Minister of Agriculture to effectively over-rule a judgement by the Minister of Health and Welfare that a particular pesticide was unsafe. Environment Canada officials were more understanding of their sometimes tenuous relationship with Agriculture because of the greater ambiguity of environmental risk assessment.

Each department also had its own special concerns. For Health and Welfare, the issue was potentially devaluing its reputation by association. The Department had a solid record in the eyes of both the general public and other governmental actors for protecting the health of Canadians and for sound regulatory administration. As the pesticide registration controversy gained prominence, however, officials increasingly worried that this legacy would be jeopardized by HWC's involvement in registering pesticides that no one could guarantee were risk-free. Environment Canada's bone of contention was the (inappropriately) low profile environmental matters were being given in the Minister of Agriculture's decision-making.

3.3 Alachlor

Dissatisfaction with the state of pesticide registration was rampant by the mid 1980s. It reached epic proportions when the Minister of Agriculture decided to deregister the pesticide alachlor in 1984. Events surrounding the deregistration of alachlor in 1984-89 brought to a head concerns about how the risks posed by pesticides were assessed and by whom.¹⁰² The alachlor case was a key catalyst for the pesticide registration review. It also had important implications for subsequent treatment of the mode issue.

Alachlor, a herbicide widely used on corn and soybean crops, was registered for use in Canada under the PCPA in 1969. The product's registration was supported by toxicological studies conducted by Industrial Bio-Test Laboratories on behalf of the registrant, Monsanto Canada Inc. Following the discovery of fraud at IBT, Monsanto submitted replacement studies and supplemental data on alachlor's toxicological effects to Canadian regulatory authorities in 1982. The Toxicology Evaluation Division at Health and Welfare's Health Protection Branch determined in a preliminary review of the database that alachlor was "one of the most potent carcinogenic pesticides

¹⁰² This point is made by George Hoberg, Jr. in his "Risk, Science and Politics: Alachlor Registration in Canada and the United States," CJPS, XXIII:2 (June 1990), pp. 257-277. Hoberg uses the alachlor case to test three theories about the causes of divergent regulatory outcomes.

presently in use and should be removed from the market as soon as possible".¹⁰³

The Division moreover claimed that "[a]lternate pesticides of equivalent efficacy [were] available to take its place and there should be little or no hardship to farmers."¹⁰⁴ There were on-going discussions between Agriculture Canada, the Health Protection Branch and Monsanto over the next two years on appropriate interpretations of the scientific data and risk assessment techniques. Health and Welfare formally recommended to Agriculture in June 1984 that "the use of all currently registered formulations of alachlor be cancelled."¹⁰⁵ The Minister of Agriculture cancelled alachlor's registration in February 1985.¹⁰⁶ The decision was taken "based on the advice of Health and Welfare Canada [...] regarding the potential cancer risk associated with alachlor, primarily from exposure to persons working with the chemical."¹⁰⁷

¹⁰³ From Exhibit 154 submitted to the Alachlor Review Board which is reproduced in part in Canada, Alachlor Review Board, Report of the Alachlor Review Board (Ottawa, 1987), p. 34.

¹⁰⁴ Ibid.

¹⁰⁵ A letter dated June 25, 1985 from Dr. Morrison, Assistant Deputy Minister, Health and Welfare Canada to Dr. McGowan, Assistant Deputy Minister, Agriculture Canada which is reproduced at p. 37 in the Alachlor Review Board's report.

¹⁰⁶ Monsanto was, however, granted a temporary registration for alachlor to cover the balance of the calendar year.

¹⁰⁷ Text of the Minister's cancellation letter to Monsanto, February 5, 1985, reproduced at p. 11 in the Report of the Alachlor Review Board (Ottawa, 1987).

Monsanto immediately applied for a hearing into the cancellation decision, as it was entitled to under s. 23 of the pest control products regulations. The Minister of Agriculture set up the Alachlor Review Board (ARB) pursuant to s. 24 of the regulations in November 1985. The ARB's mandate was to re-examine the evidence leading up to cancellation.¹⁰⁸ After 41 days of public hearings, the Board recommended, in 1987, that alachlor's registration be restored. The Minister of Agriculture announced in January 1988 that he nevertheless stood by his original decision that alachlor posed an unacceptable risk of harm. Alachlor's deregistration consequently remained in effect.

Alachlor was "a lose-lose result".¹⁰⁹ Farmers and the pesticide industry felt betrayed by the Minister of Agriculture. Producers, in particular, had fully expected the Minister to follow the ARB's advice. They believed that alachlor was essential for Canadian corn and soybean production to remain economically viable and internationally competitive, and predicted that its removal from the market would have serious financial repercussions. Moreover, there was a historic, implicit, but well-

¹⁰⁸ This mandate was later extended following litigation in the Federal Court of Canada concerning the Minister of Agriculture's decision to deny an application by Monsanto for an extension of alachlor's temporary registration and the Minister's subsequent decision to deny a review of his action. The Federal Court ordered the Minister in January 1986 to refer the temporary registration issue to a s. 24 review board. The issue was dealt with by the already-established Alachlor Review Board.

¹⁰⁹ Draft paper on Canadian pesticide regulation in the 1980s in the files of the Pesticide Registration Review Team Secretariat, probably prepared by H. Versteeg in his capacity as Executive Secretary.

accepted pact between the Minister and his major clients to keep in mind.¹¹⁰ The Minister's responsibilities in this pact revolved around him being the protector and special advocate of farming interests in the registration process; for instance, by ensuring that producers had full access to available pesticides as quickly as possible and at low cost, by buffering them against recalls and cancellations, and by being a strong voice for the economic benefits of agricultural production. In deregistering alachlor, then, the Minister had reneged on his side of the deal. As the producer community saw it, alachlor's deregistration could only be explained by the Minister caving into the demands of other constituencies, ones insensitive to the requirements of sustainable and competitive agriculture.

For the pesticide industry, alachlor symbolized the victory of politics over science. Deregistration, manufacturers argued, was the direct result of the machinations of powerful constituencies inside and outside the federal government with complementary approaches to interpreting toxicological risks. The industry accepted that different sciences and therefore different approaches to risk assessment legitimately underlaid pesticide-related decision-making in the many sectors of the policy community. However, from the industry perspective, alachlor's deregistration set a dangerous precedent for substantially reduced predictability in the registration

¹¹⁰ Agriculture Canada's status as a "clientele department" is described in Coleman, Business and Politics, p. 103. In a general sense, the main function of the Minister of Agriculture and the Department of Agriculture is to serve as the voice for farmers in federal government policy- and decision-making.

process because subjective factors appeared to be winning out in the balancing of risks and benefits. The industry also feared that alachlor's deregistration foreshadowed a wave of further product deregistrations under pressure from anti-pesticide forces. This fear was shared with farmers who anticipated that more deregistrations would greatly reduce access to essential farm inputs.

Other stakeholders were equally dissatisfied.¹¹¹ Environmental groups, although happy with the end result, expressed frustration with the cumbersome, expensive and time-consuming cancellation-review process. Regulatory officials, especially at the Pesticides Directorate, felt sandwiched between a rock and hard place.

The other salient aspect of the alachlor events for the purposes of the dissertation's case study was that the Review Board's report to the Minister of Agriculture constituted yet another damning indictment of the system in place for making registration decisions. The Board concluded from the evidence presented to it that Health and Welfare had gone "beyond its proper mandate of identifying and communicating the magnitude of the risks, by concluding that the registration of alachlor should be cancelled".¹¹² Nor had the Department effectively conveyed to Agriculture Canada officials the uncertainties and assumptions inherent in its

¹¹¹ Stakeholder attitudes post-alachlor are examined more fully in Chapter 5.

¹¹² Alachlor Review Board, Report, p. 47.

toxicological findings. Agriculture, on the other hand, was accused by Board members of being too passive in determining whether the risks posed by alachlor were unacceptable. They considered, moreover, that in the circumstances the Minister of Agriculture had not had the background necessary to make a judgement about alachlor's registration. In a parting shot, the Review Board reminded regulators that according to the pest control products regulations and the 1982 Agriculture-Health and Welfare memorandum of agreement "the decision on the acceptability of the risk [is] to be made by the Minister of Agriculture, not dictated by the recommendation from Health and Welfare."¹¹³ One of the strengths of the Review Board report was to convincingly demonstrate the need for ways of resolving clashes amongst the risk perspectives and mandates of the federal departments involved in registration and their clients.

The critics did not let up even after alachlor. A review paper prepared by the Pesticides Directorate in February 1989 showed that, between 1987 and 1988, 129 recommendations in 15 key areas were made on improving the registration system.

¹¹³ Ibid., p. 48.

Some of these came from previously silent sources, such as the Auditor General,¹¹⁴ the House of Commons Standing Committee on Agriculture¹¹⁵ and the Senate¹¹⁶.

The House Standing Committee on Environment and Forestry examined the use of pesticides in 1988. While the focus was supposed to be on alternatives to chemical pesticides, the mode for pesticide registration proved to be a highly controversial issue at the Committee's hearings. Several witnesses called for a stand-alone regulatory agency modelled on the U.S. Environmental Protection Agency. Another pointed out that the Minister of Agriculture might be tempted by the alachlor situation to embrace an EPA-like arrangement; he urged Committee members, however, to be cautious:

...although there are many useful changes that could and should be made to the structure of law, practice, and administration for pesticides in Canada, there are also some solid virtues in the established system. This leads me to suggest that it would be better to continue to improve the existing system rather than to discard it and

¹¹⁴ Auditor General of Canada, Report to the House of Commons, 1988 (Ottawa: Minister of Supply and Services, 1988), which examined the use of risk-benefit analysis in the registration process.

¹¹⁵ House of Commons Standing Committee on Agriculture, Report on the Regulatory Process for Farm Chemicals and Pesticides, 1988. This study called for a thorough review of Canada's pesticide registration system.

¹¹⁶ Canada. Senate. Standing Committee on Agriculture and Forestry. Minutes of Proceedings and Evidence. Issues No. 22, 23, 25, 28 and 33, from April to September 1988, cover the Committee's hearings on alachlor.

3

PM-1 3½"x4" PHOTOGRAPHIC MICROCOPY TARGET
NBS 1010a ANSI/ISO #2 EQUIVALENT

PRECISIONSM RESOLUTION TARGETS

to embark upon some wholly new and untried
course.¹¹⁷

He went on somewhat prophetically:

...it should not be forgotten that in the parliamentary system someone will have to answer for the government's risk management decisions in the House. There is no escaping this fact. Thus, the decisive question is not whether the Minister of Agriculture should be relieved of this responsibility, **but rather who should assume it instead.**"¹¹⁸

4.0 SUMMARY

This chapter set the context for analysis of the mode choices in the 1988-92 federal pesticide registration review. The perspective in the opening sections was primarily historical. Section 1.0 discussed early and modern pest control products and their uses as well as the development of a commercial pesticide manufacturing industry. Section 2.0 focussed on Canada's regulatory response to the pesticide problem, in particular the establishment of a compulsory registration system. As the section showed, there was striking evolution in the aims of pesticide registration in the

¹¹⁷ Canada. House of Commons. Standing Committee on Environment and Forestry. Minutes of Proceedings and Evidence, Issue No. 26, April 14, 1988, p. 4. The witness was Professor William Leiss of Simon Fraser University, a recognized expert on pesticide regulation.

¹¹⁸ Ibid., pp. 6-7, emphasis added.

years following Confederation through to the 1960s. The power structure of the pesticide policy community was also correspondingly redrawn. The policy community was for a long time a closed shop dominated by the Minister of Agriculture and regulators in the Department of Agriculture, producers and, to a lesser extent, pesticide manufacturers. By the 1970s, the policy community had exploded. Four other federal departments assisted in assessing the value, merit and safety of pesticides and several new constituencies (environmentalists and public health and consumer activists) claimed places in the registration process.

Section 3.0 explained the reform forces that converged on the pesticide registration system in the 1980s. In many cases, dissatisfaction with regulatory failure translated into direct assaults on the existing mode for regulation. Four main types of mode-related proposals for reform, described and assessed in Section 3.1, began to circulate in the policy community. The Department of Agriculture responded with a major overhaul of the pesticide registration programme and by signing memoranda of understanding with its advisory departments in the hopes of clarifying their respective roles and responsibilities. Restoration of the policy community's confidence in the registration system was cut off prematurely in 1985, when the Minister of Agriculture deregistered alachlor on the advice of the Minister of Health and Welfare. As shown in Section 3.3, the deregistration of alachlor reactivated discontent in virtually all corners of the policy community. Much of this centered once again on the perceived shortcomings in the existing mode for regulation.

Chapter 5

MACRO ANALYSIS: AN OVERVIEW OF THE FEDERAL PESTICIDE REGISTRATION REVIEW

This chapter chronicles the 1988-92 federal pesticide registration review. There are three sections. Each corresponds with a distinct mode-related phase of the review.

Section 1.0 builds on the context developed in Chapter 4. It covers the period 1988 to spring 1989. The purpose is to provide greater detail about the genesis of a comprehensive exercise in reforming the federal pesticide registration system, including the mode for regulation. The 1988-89 period equates with what in Kingdon's terminology was agenda-setting for the PRR and its deliberations on the mode issue.¹

The Review Team phase of the PRR, which lasted from April 1989 to December 1990, is examined in Section 2.0. This phase culminated in the dissertation's first choice of mode for regulation: a recommendation for an

¹ Kingdon, Agendas, Alternatives, and Public Policies. The concept of agenda-setting is defined and explained at pp. 3-4.

independent Pest Management Regulatory Agency reporting to the Minister of Health and Welfare.

Finally, Section 3.0 describes developments related to the formulation of a federal government response to the Review Team's report. This period, from January 1991 to February 1992, resulted in a second mode outcome, namely retention of an embellished Minister of Agriculture-headed departmental arrangement.

1.0 GENESIS: THE ROOTS OF A COMPREHENSIVE EXERCISE IN PESTICIDE REGULATORY REFORM

This section examines the genesis of the federal pesticide registration review. The Minister of Agriculture grudgingly conceded in March 1988 that Canadians had lost confidence in the registration system. This opened the door to a sweeping exercise in regulatory reform. Section 1.1 discusses early planning for the pesticide review, a central part of which was consultation with the policy community. Section 1.2 explains that a quartet-plus-one dominated agenda-setting. The major faultlines and countervailing forces in the policy community concerned the need for a review, as well as its nature and mandate. Section 1.3. outlines the basic strategy eventually adopted for the pesticide review in the spring of 1989.

1.1 Deciding on a Review

Scarcely six weeks after the Minister of Agriculture confirmed alachlor's deregistration, on March 1st, 1988, the Canadian Federation of Agriculture (CFA) held its annual general meeting in Winnipeg. A resolution calling for a judicial inquiry into Canada's pesticide registration process was easily approved. This was further proof of the degree of fracture between producers and the Minister of Agriculture John Wise over his handling of alachlor. But it was at the same meeting that the Minister chose to finally acknowledge that "the status quo with respect to the federal registration of pesticides is no longer acceptable". Wise promised to launch a review of pesticide regulation. The objective, he said, was an improved regulatory system that would "meet the needs of all stakeholders". Translating the Minister's vague announcement into a detailed plan for a pesticide review kept senior bureaucrats, non-governmental pesticide interests and Wise's successor busy for the most of the next year.²

Wise's ministerial style was well-defined by the spring of 1988. He was not a policy leader. Instead, he "allow[ed] the direction of farm policy to be set elsewhere

² A detailed, insider's account of the pesticide registration review in the period 1988 to December 1990 is found in Hajo Versteeg, A Case Study in Multi-Stakeholder Consultation: The Corporate History of the Federal Pesticide Registration Review or How We Got From There to Here (Ottawa: Canadian Centre for Management Development, March 1992), Vol. 1 and Vol. 2.

within the government and cabinet."³ On the major issue during his term of office, the farm crisis, Wise is seen as having been hostage to senior officials in his department as well as several of his Cabinet colleagues with their own gameplans for the food sector.⁴ The Minister's role in alachlor had much the same flavour. Whether it was cause or effect of his policy impotence, Wise was a team-player who preferred to avoid conflict and confrontation. This partly explained the importance he attached to reducing the sting of his clients' attacks on federal farm policy, by consulting with them.

Fully in keeping with this practice, Wise turned to the Pest Management Advisory Board for advice on an approach to pesticide regulatory reform after his announcement to the CFA. The PMAB was one of the newest members of the pesticide policy community. As mentioned in Chapter 4, it had been set up by the Minister in July 1985 following the Salter and Leiss report recommendation for broadened public consultation in the pesticide regulatory process.⁵ The Board's name implied its central function:

³ Barry K. Wilson, Farming the System (Saskatoon: Western Producer Prairie Books, 1990), p. 54.

⁴ Ibid. Wilson's interpretation of why this happened focusses on a number of factors, including: the growing integration of agriculture with the national economy, the impact of globalization on autonomy in domestic policy-making, policy uncertainty (between a business ideology and intervention), the political importance of the farm crisis to the Tory government and lack of support from the Prime Minister. The impressive constraining power of these forces on ministerial initiative is suggested when Wilson argues that Wise had actually arrived at Agriculture in 1984 with a clear agenda for action.

⁵ See Salter and Leiss, Consultation in the Assessment and Registration of Pesticides.

to make recommendations to the federal Minister of Agriculture on broad policy questions of public concern relating to the pest management process, and to assess specific pest/pesticide issues if warranted in the national interest.⁶

This mandate involved the Board in issues beyond the Pest Control Products Act. In its first three years of operation, for instance, the PMAB had proposed guidelines for access to propriety data, examined the problems of temporary registration, developed a voluntary complaint procedure and advised the Minister on the alachlor review board process. The PMAB's principal tool was consultation: "assessing issues with all interested parties in a fair, open, balanced and complete manner."⁷

The chair of the PMAB conducted bilateral discussions on a pesticide review with stakeholders inside and outside the federal government throughout the summer of 1988 and into the fall, assisted by a special advisor to the Deputy Minister of Agriculture. There were two central issues: the appropriate format for the review and the scope of its mandate.⁸ The next year, which featured a series of false starts followed by measured progress, showed that this was not a simple assignment.

Developments in the larger Canadian policy process temporarily derailed the review on several occasions. In June, the initial flurry of macro-level planning based

⁶ As reported at pp. 5-6 in Versteeg, "The Role of the Pest Management Advisory Board".

⁷ Ibid., p. 6.

⁸ See Versteeg, A Case Study, Vol. 1, pp. 11-17.

on the PMAB's consultations with stakeholders came to a sudden halt, when Wise unexpectedly announced his intention to resign from public life. Responsibility for the Agriculture portfolio was, for all intents and purposes, quietly transferred to the Deputy Prime Minister, Don Mazankowski. Given Mazankowski's eminent stature in the Tory Cabinet,⁹ his appointment potentially added important fresh political weight to finding a solution to the pesticide problem. The new minister dispelled any lingering uncertainty about his commitment to a comprehensive pesticide review at a July federal-provincial meeting of ministers and deputy ministers of agriculture.

The other major intervening event was a federal election in September. After a period of bureaucratic inactivity during the election campaign and the confirmation of Mazankowski as Agriculture Minister (and now also coincidentally Minister responsible for Privatization and Regulatory Affairs), planning for the pesticide review gained renewed steam. This came as a huge relief to stakeholders who had been frustrated by the earlier round of consultations.

Mazankowski's second-coming marked a major shift in the pesticide review. The central difference was that the Minister of Agriculture reclaimed the driver's seat. On September 30th, Mazankowski issued a press release formally announcing that

⁹ Mazankowski was simultaneously Deputy Prime Minister, President of the Queen's Privy Council for Canada and chair of the Cabinet Operations Committee. His assumption of the Agriculture portfolio took place, formally, on September 15, 1988 (when Wise officially resigned). Mazankowski was confirmed as Minister of Agriculture in the January 1989 appointments to Cabinet.

Canada's pesticide registration system (not, as Wise had originally proposed, the pesticide regulatory system writ large¹⁰) would undergo "a thorough review". The priority Mazankowski intended to give to the pesticide registration issue was also reflected in the fact that a decision had finally been made about the general format for the review. The second half of the press release therefore announced that invitations to participate would soon be sent out to interests outside Agriculture Canada: representatives of producer organizations, the pesticide industry, special interest groups and other relevant federal departments.

Consultations with the policy community resumed. While the chair of the Pest Management Advisory Board continued to play a leadership role in designing the review, Mazankowski's deputy minister, Jean-Jacques Noreau, became much more conspicuous. Thirty selected stakeholders received a letter from Noreau in November. The letter solicited suggestions for the PRR's terms of reference, a process for the review (especially how to ensure maximum policy community participation), as well as nominations for a Review chair.

The Minister was never far removed from these planning and organizing activities. He had his deputy securely at the helm. Further, the ministerial office was lobbied by some of the most highly institutionalized interests in the policy community

¹⁰ On the distinction between pesticide registration and pesticide regulation, see Chapter 4.

who sought to complement their influence in the consultations by exploiting a privileged relationship with the Minister. This was case with the Canadian Federation of Agriculture. The CFA had reacted to Mazankowski's late September announcement of the review "with some optimism".¹¹ Showing that old habits die hard but also where power really lay, the group expressed its views on the upcoming PRR directly to the Minister.¹²

1.2 The Policy Community: Perspectives on the PRR

Consultations on Mazankowski's pesticide registration review revealed a complex network of interests. The primary faultline was between sectors in the policy community which advocated or supported a review, and those which, while not necessarily flatly opposed, resisted it. Within these two camps, stakeholders supplied diverse answers to the still-unanswered questions of 1) the kind of process to be used for the review and 2) the appropriate terms of reference to be assigned to the reviewing body. The consultative process also began to uncover mixed, sometimes competing perspectives on the mode for regulation and its significance in relation to

¹¹ Letter from Peter Marten, Executive Secretary, Canadian Federation of Agriculture to the Honourable Don Mazankowski, Minister of Agriculture, October 17, 1988.

¹² Ibid.

reforming pesticide registration. The overall structure of key countervailing forces in the policy community, a quartet-plus-one, is described in this section.

As suggested in Chapter 4, farmers were the most vocal proponents of a review. The agricultural community had in the past been reluctant to embrace pesticide regulatory reform out of fear that environmental interests would get the upper hand. In the wake of alachlor and a deepening view that "There isn't much more [they] could lose,"¹³ farm groups such as the Ontario Corn Producers' Association, Focus on Inputs, the Canadian Federation of Agriculture and the Canadian Horticultural Council called for a radical overhaul of the entire pesticide regulatory system. Clarifying the role of risks and benefits in registration decision-making was at the top of their agenda. So was improving access and availability through, among other things, greater harmonization with the American regulatory regime and implementation of a special programme for minor use pesticides. All of these concerns pertained to the policy dimensions of Canada's pesticide regulatory regime.¹⁴

¹³ A senior official from the Ontario Corn Producers' Association, quoted in "Pesticide Reform Looms," Farm and Country, May 10, 1988, pp. 12-13.

¹⁴ An excellent survey of the farm perspective is found in Bill Deen and Glenn Fox, "A Revised Federal Pest Management Regulatory System: Implications for Canadian Farmers," a discussion paper, George Morris Centre, University of Guelph, May 1992, especially pp. 3-14.

Politics nevertheless explained the better part of farmers' push for reform.

The prevailing belief amongst agricultural producers was that John Wise had turned traitor when, in deregistering alachlor, he took action that was patently opposed to their expressed wishes.¹⁵ Thus, farm associations across the country demanded compensation for the loss (to certain users) of a valuable pesticide, and for the (general) risk of losing future access to other control products. Exposing their minister's regulatory activities to external scrutiny was one of the political payments they wanted extracted.

Besides alachlor and dissatisfaction with the policy aspects of pesticide regulation, another factor influenced farmers' attitudes toward reform. This was the recent Stein Committee review of Canada's drug registration system.¹⁶ Producers

¹⁵ Paradoxically, Wise's perception of his role as Minister of Agriculture coincided with how the farm community understood the age-old clientele relationship: "Like most agriculture ministers, Wise considered Canada's producers 'his farmers.' His role in cabinet and government was to defend them, to protect them from the policies of other departments, to make sure they were receiving due credit for their role in creating national wealth." See Wilson, *Farming the System*, pp. 19-20. To understand why Wise acted contrary to farmers' expectations, recall the trump card possessed by Health and Welfare in registration decisions. Human health and safety concerns had tremendous power in federal government decision-making in the mid 1980s. In this regard, alachlor parallels the fall 1987 tuna scandal where John Fraser, the Minister of Fisheries and Oceans, approved a shipment of tainted products. Fraser was quickly forced to resign. This may also have been the price Wise paid (see below), albeit in reverse, i.e. for taking an allegedly unsafe pesticide off the market.

¹⁶ The Stein Committee, established by Health and Welfare Canada in January 1987, was formally known as the Working Group on Drug Submissions. Its mandate was to review and make recommendations on Canada's registration system for prescription drugs. Increased resources were allocated by Treasury Board in 1988-89 to implement many of the Committee's recommendations, including a management information system

correctly maintained that there were important parallels between the regime for registering drugs (under the Food and Drugs Act) and the regime for registering pesticides. As they saw it, implementation of the recommendations in the Stein Committee report promised to greatly reduce the time regulators took to evaluate drugs. The Stein exercise was therefore a precedent, the argument went, for achieving analogous results in the pesticide area: if Canadians could have improved access to prescription drugs, presumably the pesticide registration system could be streamlined in the same fashion to give farmers improved access to essential farm inputs.

The position of the farming sector, then, was that pesticide regulatory reform should be opened up. This applied to both:

- . the issues covered - pesticide regulatory policy rather than only the registration process; and
- . the interests invited to participate - a moderately external review modelled a la Stein, which implied participation on equal footing from producers, industry and government regulators (i.e. Agriculture, Environment and Health and Welfare).¹⁷

to track the status of drug submissions and the use of contracting-out for certain drug reviews.

¹⁷ See, e.g., the letter from Marten, Executive Secretary of the CFA, to Mazankowski.

Producers appreciated that in recommending this kind of reform they were taking a chance. Among other things, they would have to confront an idea that had growing legitimacy in particular quarters of the policy community, namely relocating authority for pesticide registration somewhere other than with the Minister of Agriculture (see Chapter 4). It was confidently predicted that taking a chance with an uncustomarily broad review was worth the political and other benefits that would be won.

From the perspective of the Minister of Agriculture, Don Mazankowski, restoring credibility with farm interests was necessarily a prime strategic priority following alachlor. Mazankowski's relationship with his major clients was vastly different from his predecessor's, even at this relatively early stage in his mandate. The new minister was one of two "farm-sector policy godfathers" in the Tory caucus.¹⁸ He had been involved in virtually all major agriculture-related issues since 1984. In contrast to Wise, Mazankowski was an activist minister, with a clear mission to inject a strong dose of business principles into federal farm policy. Mazankowski was overshadowed neither by stronger ministers, nor Agriculture bureaucrats.

Mazankowski faced a potentially volatile political situation in the fall and winter of 1988-89. In neither of his capacities - as head of Agriculture Canada, nor

¹⁸ Wilson, Farming the System, p. 70. The second godfather, Bill McKnight, surfaced later in the pesticide registration review, in the spring of 1991.

as a minister in a Tory government counting on continued strong electoral support in agricultural communities - could the Minister afford to have the farm segment of his primary policy community remain indefinitely off-side. One source of valuable leverage was delivering an acceptable product to farmers, such as responding in some way to their increasingly vehement demands for pesticide regulatory reform and granting them a central role in it. A pesticide review accomplished two goals. Undoubtedly, it left farm interests with the impression that Mazankowski, like them, was unhappy with the status quo. The Minister also, however, avoided forfeiting complete control; under the review option, Mazankowski could reserve the right to cast the final verdict on the direction reform would actually take. In short, there were a number of solid political reasons for the Minister of Agriculture to be receptive to the idea of an investigation into the pesticide registration system operated by his department.

The Crop Protection Institute of Canada (CPIC), the major association representing manufacturers of agricultural pesticides, was the other key agitator for pesticide regulatory reform in the fall of 1988. The impetus for a review was much more deeply rooted in CPIC's case than it was for farmers. Pesticide manufacturers had experienced "extreme frustration"¹⁹ with the registration system throughout most of the preceding decade. Alachlor's deregistration was for them only a symptom of basic problems with the system; it showed that politics could, and did, interfere with

¹⁹ Confidential interview.

what in the industry's eyes was supposed to be an objective, science-based assessment of safety, value and merit. The alachlor events triggered a finely-tuned campaign by CPIC for a review of pesticide regulation. Fortuitously for the Institute, alachlor had activated other reform-minded segments of the policy community for different reasons.

As CPIC saw it, there was "one fundamental problem" with Canada's pesticide regulatory system in the 1980s: it took substantially longer to get products registered in Canada compared to the United States.²⁰ The registration system per se was singled out as the main culprit, and in particular Health and Welfare's role as an advisor on toxicology. CPIC contended in addition that getting a product through the registration system and onto the Canadian market could sometimes take longer than developing it. Whatever its measure, the registration time lag reportedly made a substantial contribution to the industry's regulatory burden and affected investment decisions and therefore the development of products for use in Canadian agriculture. The nature of the industry's operating climate made the situation worse: on the one hand, there was tremendous pressure to come up with new environmentally-friendly pesticides and, on the other, rationalization/restructuring was being hindered by the heavy shackles of regulation. CPIC underscored that the time lag had an input-based link with the ability of Canadian farmers to compete in world markets. The Stein Committee exercise convinced the Institute's membership, as it had farmers, that a faster product evaluation system could be designed.

²⁰ Confidential interview.

The spirit of the Stein Committee also influenced the process CPIC advocated for the pesticide registration review. However, the Institute's guest list went beyond the triad of agricultural producers, pesticide manufacturers and regulatory officials implied by the Committee and favoured by the farm sector. Under the scheme CPIC proposed, the reviewing body's membership would come from the federal government (Agriculture, Environment and Health and Welfare), provincial government departments involved in regulating pesticides, farmers, forestry users, the environmental movement and, of course, the pesticide manufacturing industry. Leaving out any of these stakeholders, CPIC argued, risked casting public aspersion on the PRR even before it got off the ground. CPIC recommended that the review process be chaired by an independent party, such as the Regulatory Affairs Branch of the federal Office of Privatization and Regulatory Affairs.

The final lead actor vying for influence over the agenda for the PRR was a natural one. For the chief regulator, the Pesticides Directorate, Mazankowski's planned pesticide review constituted an unwarranted interference. The review interfered not only with the Directorate's day-to-day administration of the registration system, but also its own resource-constrained efforts at regulatory reform. PD officials considered that they had an excellent post-1985 record of introducing important improvements in the registration system in response to outside critics. The registration problem, to their mind, was above all a problem of scarce resources; the

system itself was "not fundamentally broken"²¹. The proper way of addressing this kind of problem was through the normal Agriculture and government-wide resource allocation processes.

The Directorate's reaction to the PRR was also based on firsthand experience with the politics of pesticide registration. Given the preceding decade when the registration system had been "studied to death"²² by countless discontented parties (see Chapter 4), officials at the PD were highly skeptical that constructive, broadly supported recommendations could come out of a multi-stakeholder consultation process. Moreover, they argued, there was no will either at the political level or in Agriculture's senior management cadre for an improved - that is, a better-resourced - registration system in the existing fiscal climate. The PD contended that the resources targetted by Mazankowski for the pesticide review would deliver far greater returns if spent on further improving the status quo.

Finally, the PRR challenged the Pesticides Directorate for ownership of pesticide regulatory reform. The PD's small Issues, Planning and Priorities Division had claimed this territory since 1986-87. The IPP mandate was "to develop and implement solutions to broad pesticide policy questions and issues of special

²¹ Confidential interview.

²² Confidential interview.

concern."²³ The Division, with 21 % of the PD's annual 62 PY allocation, had consequently taken on responsibility for issues management and policy development (e.g. development of a product specific registration policy and guidelines on environmental fate, as well as a report on groundwater contamination by pesticides); stakeholder consultation; and regulatory reform. There was an obvious overlap with the activities planned for the PRR. In an effort to limit the damage, the Directorate maintained that the review should be narrowly confined to pesticide registration, and to federal regulatory officials, producers and the pesticide industry. Matters of broad regulatory policy did not belong, it was argued, in the hands of non-governmental interests.

The main agenda-setters for the PRR, then, comprised a quartet: farm groups, the Minister of Agriculture and his deputy, the Crop Protection Institute, and officials at the Pesticides Directorate. Superimposed on top, however, was a far less tangible - but still-ever present - factor: the themes and priorities of environmentalism. What was striking in the latter case was the extent of influence on the PRR's design, despite the absence of an effective, well-defined "green" pesticide lobby.

Objectively, environmentalism was bound to have an impact on the pesticide review. This simply mirrored significant changes in Canadian public opinion and

²³ Agriculture Canada. Pesticides Directorate. Review Paper: Pesticide Registration in Canada (Ottawa, September 1989), p. 10.

values and corresponding shifts in approaches to policy- and decision-making within the federal bureaucracy. Farm groups and pesticide manufacturers were the first to admit that the principles of environmental sustainability had encroached on their world.

The boundaries of the environmental sector of the pesticide policy community nevertheless remained murky. As discussed in Chapter 4, environmental interests were relative newcomers to the field of pesticide regulation. The Hall report and Vigod and Castrelli's study for the Law Reform Commission of Canada had both heightened awareness of pesticide issues in the environmental sector during the preceding ten years. Moreover, a number of environmental advocacy groups had actively participated in the alachlor hearings. Despite these developments, the usual policy community for environmental interests centered around Environment Canada, not the Department of Agriculture.

The over-riding message from the environmental sector in the PRR consultations was that the existing registration system was "radically unsatisfactory"²⁴. This, however, added nothing really new; it merely reinforced the pro-review momentum initiated - and largely controlled - by farmers and pesticide manufacturers. The real significance of representations by the Canadian Environmental Network and other environmental interests lay in their contribution to

²⁴ Confidential interview.

ensuring a multi-stakeholder review process in which an environmental perspective (with goals such as reducing or even eliminating the use of chemical pesticides) would be entitled to compete with the more traditional farm and industry approaches to pesticide regulation in Canada.²⁵

Other interests were involved in the agenda-setting phase of the pesticide review. They were marginal actors, however, compared to the quartet-plus-one. Their participation in the consultations was driven by a roadmap of the pesticide policy community, an arbitrary yet logically sound determination by the Deputy Minister of Agriculture and the chair of the PMAB about which interests had legitimate stakes in the pesticide registration issue.

A number of interests joined the consultations primarily because of a natural affinity between the registration system and other areas of federal policy of immediate concern to them (e.g. food regulation and occupational health and safety regulation). This was the case for the Consumers' Association of Canada, the Canadian Public Health Association and the Canadian Labour Congress. For these groups,

²⁵ This contribution should not be underestimated. It was in no way a sure bet that environmental interests would be directly represented in the PRR. In fact, as observed earlier in Section 1.2, the environmental sector would have been excluded under the Stein model for a review. The Minister of Agriculture also received advice during 1988-89 that excluding environmentalists was necessary if he was sincere about the PRR producing agreement on regulatory reform (various confidential interviews). See the comments below about Environment Canada's position on stakeholder participation in the review.

participating in the PRR was part of a larger mandate to pursue public interest objectives in the regulatory arena.

The second set of peripheral actors was made up of federal government departments implicated in the review because of their administrative responsibilities in the registration system. As described in Chapter 4, Health and Welfare was one of several core departments that advised the Pesticides Directorate on toxicological questions. The advisory function was shared by two Health and Welfare groups: the Environmental Health Directorate, which made recommendations on occupational safety, cautionary labelling statements and health risks, and the Food Directorate, which reviewed pesticide safety specifically from the perspective of food residues.²⁶ One of Health and Welfare's strategic objectives during the mid 1980s had been to enhance its function in the registration system. A much expanded understanding of the role a health risk adviser should play explained several initiatives, for instance a media campaign launched to promote safe pesticide use and studies undertaken by the Department of user behaviour. It was therefore not surprising that Health and Welfare had serious complaints about how the registration system currently operated

²⁶ However, the Food Directorate's principal pesticide-related regulatory activity flows from the Food and Drugs Act, not the Pest Control Products Act. The FDA assigns Health and Welfare legal responsibility for establishing and enforcing maximum pesticide residue limits (i.e. a matter of food safety regulation). See s. 4(a) which prohibits the sale of food that "has in or on it any poisonous or harmful substance" and s. 4(d) which prohibits the sale of food that is "adulterated". The Governor-in-Council's authority to make regulations concerning these matters is found in s. 30 of the legislation.

(see Chapter 4). Nevertheless, the Department jealously guarded what it considered was an exclusive right to scrutinize its own performance. The planned pesticide registration review trenched on this private territory.

Another of the core departments, Environment Canada, was markedly less resistant to a pesticide review. The Department's role as an advisor on environmental toxicology was discharged by two groups, the Conservation and Protection Service (CPS, which evaluated data on environmental fate and toxicology and advised on persistence, bioaccumulation, movement and pesticide impacts on nontarget organisms) and the Canadian Wildlife Service (CWS, which advised on pesticide impacts on birds and other wildlife). Officials there had been approached very early on by senior bureaucrats from Agriculture Canada about participating in an Agriculture-farmers-pesticide industry review of the registration system. The invitation was rejected out of hand, on the grounds that Agriculture was trying to free-ride on Environment's "green" image. The bottom line for Environment was that the PRR had to be genuinely multi-stakeholder. As discussed in Chapter 4, pesticide officials at the CPS and the CWS - like their colleagues at Health and Welfare - had concerns about how the pesticide system dealt with input from advisory departments. The division of administrative roles and responsibilities was still not fully satisfactory to the Department, even despite the barely year-old Agriculture-Environment memorandum of understanding.

1.3 The Pesticide Registration Review Team Approach

The basic outline of a strategy for the PRR finally emerged in the spring of 1989. The most difficult question for the organizers was how to reconcile two requirements:

- 1) for manageability - the reviewing body had to be able to make decisions, which put limits on its size; and
- 2) for legitimacy - the PRR had to have participation from "as many interests as possible".²⁷

After prolonged discussions between Noreau and the chair of the PMAB, outside stakeholders, provincial regulators, the core departments and Mazankowski's office, the Minister decided on "an independent study of the pesticide registration process".

Other options had been seriously considered by Mazankowski and senior Agriculture officials during the winter of 1988-89.²⁸ The original plan, in fact, had been modelled on the use of sectoral advisory groups (SAGITs) in the Canada-U.S. free trade negotiations.²⁹ This entailed a review team with decision-making authority

²⁷ Letter from Jean-Jacques Noreau, Deputy Minister of Agriculture, to various stakeholder organizations, November 9, 1988.

²⁸ For instance, an alachlor review board-type format. See also Versteeg, A Case Study, Vol. 1, at pp. 13-15.

²⁹ The SAGIT (Sectoral Advisory Group on International Trade) model is described in G. Bruce Doern and Brian W. Tomlin, Faith and Fear: The Free Trade Story (Toronto: Stoddart, 1991), pp. 112-114.

(initially one member, later expanded to three), a technical secretariat to support the review team, and a group of stakeholders which would meet four or five times to advise on the review process, consider submissions and sign off on the final package of recommendations. Because it would only be an advisory body, the stakeholder group could be relatively large. One of the scenarios prepared for the Minister included 15 members, drawn from the federal government, the Canadian Council of Resource and Environment Ministers and the Canadian Council of Forestry Ministers, the pesticide industry, major and minor agricultural users, forestry users, the Canadian Environmental Network and the Consumers' Association of Canada.

The pillar of Mazankowski's independent study team approach was a Review Team (RT). This Team, made up of interests from across the policy community, would be empowered to advise on improving Canada's pesticide registration system in "respon[se] to environmental and health concerns".³⁰ Mazankowski's plan also called for supporting actors: a chair to manage and facilitate the Review Team's activities and provide leadership; and a small secretariat of non-technical officials, appropriately called the Pesticide Registration Review Secretariat (RTS³¹).

³⁰ Canada. House of Commons. Standing Committee on Agriculture. Minutes of Proceedings and Evidence. Issue No. 5. May 18, 1989.

³¹ The Pesticide Registration Review Secretariat became better known as the Review Team Secretariat, hence the acronym RTS.

More details about the review process were disclosed at Mazankowski's mid May appearance before the House Standing Committee on Agriculture.³² A final report was expected from the Review Team within a year.³³ As for funding, the pesticide review would be allocated \$1.25- to \$1.5-million, with the exact amount depending on the approach the Review Team adopted. Finally, the Minister identified one of the central dilemmas facing the Review Team: regulating more without compromising the government's ability to meet downsizing targets.³⁴

2.0 THE PESTICIDE REGISTRATION REVIEW, 1989-1990

The pesticide review entered a second phase, the Review Team phase, in April 1989. The major developments are described here. Section 2.1 deals with the management side - selection of a Review Team chair and executive secretary for the secretariat, questions about stakeholder participation and representation, and finding administrative resources to support the Review Team. The remaining three sections discuss how the Review Team carried out its responsibilities and ultimately tabled a final report in December 1990.

³² See House Standing Committee on Agriculture. Minutes of Proceedings and Evidence. Issue No. 5. May 18, 1989.

³³ *Ibid.*, p. 5:5.

³⁴ *Ibid.*, p. 5:9.

2.1 Managers. Members for the Review Team and a Secretariat

The pesticide registration review got its official launch on April 1st, 1989. In the days preceding, the Minister of Agriculture had made two key appointments: Ghislain Leblond as chair of the review³⁵ and Hajo Versteeg as Executive Secretary of the Pesticide Registration Review Secretariat.³⁶ The appointments marked a turning point in Mazankowski's relationship with the PRR. The review was never fully beyond the Minister's influence; it was, however, gradually given a longer leash.

Leblond came to the position of RT chair with outstanding, diverse qualifications. For the past three years, he had been the Deputy Minister of Agriculture, Fisheries and Food in Quebec. Leblond's public sector experience also included stints at the provincial Department of Transport and the Treasury Board, as well as the Bank of Canada. In between, the new chair had been a senior executive at Quebecair and the Societe quebecoise des transports.

³⁵ This position was offered, perhaps informally, to several other candidates first; the most popular reason for refusing was the immense task to be undertaken. Several candidates were unacceptable to certain interests because of their perceived bias. Leblond's appointment appears to have been directly related to the influence of the Deputy Minister. Support for this conclusion comes from the fact that Leblond's name did not come up in any of the letters stakeholders sent to Noreau in response to his November request for nominations, as well as from confidential interviews.

³⁶ Versteeg's title was originally Director, Pesticide Registration Review Secretariat.

Leblond was by no means a pesticide expert. While he had become familiar with pesticide regulation, from a provincial viewpoint, at the Ministry of Agriculture, Fisheries and Food,³⁷ the newly-appointed chair was first and foremost a leader, with an exceptional reputation for producing results and managing difficult processes. Leblond told the Standing Committee on Agriculture: "My role [is] that of a process manager, of a facilitator...other[s]...are going to provide the expertise on the substantive issues."³⁸

In point of fact, the PRR was Leblond's first assignment as Associate Deputy Minister responsible for environmental policies at Agriculture Canada. He had been appointed to this freshly-created post by the Prime Minister in April. It was expected - by Mazankowski, the Prime Minister's Office, Leblond and others - that, after a year or so as Review Team chair, Leblond would assume his responsibilities for guiding the Department's sustainability initiatives on a full-time basis.

The two hats problem had to be addressed if the PRR was to fulfill its heralding as an independent review.³⁹ Consequently, on the review, Leblond

³⁷ This meant that Leblond knew the farm perspective on pesticides. But because the Ministry of the Environment is the lead pesticide regulator in Quebec, Leblond had also had to deal with an environmental perspective.

³⁸ House Standing Committee on Agriculture. Minutes of Proceedings and Evidence. Issue No. 6. May 24, 1989, p. 6:8.

³⁹ Leblond's - and the pesticide review's - independence from the Department of Agriculture was always a priority. See, e.g., a letter from Mike McDermott, Communications Advisor, Agriculture Canada to Hajo Versteeg, Executive Secretary,

reported directly to the Minister. Leblond also had full control over the review's budget. Throughout the course of the PRR Leblond took great personal pains to ensure stakeholders that his pesticide registration review hat was always - and was always seen to be - the more prominent of the two he wore.⁴⁰

The other half of the management team was Hajo Versteeg, the Executive Secretary of the Review Team Secretariat. Versteeg brought a wealth of environment and pesticide policy-related expertise. In the early '80s, he had been a professor of environmental and natural resource law at the University of New Brunswick as well as the president of the Conservation Council of New Brunswick and a member of the New Brunswick Task Force on Cancer and the Environment. Versteeg was perhaps best known to pesticide interests, however, as the chair of the Pest Management

Review Team Secretariat, April 21, 1989, which emphasized the importance of protecting the PRR chair's perceived impartiality. The concern about staying at arm's-length also extended to more mundane areas, such as how Leblond was identified on management committee meeting agendas at Agriculture.

⁴⁰ This is not by any means to suggest that Leblond ignored his responsibilities as Associate Deputy Minister of Agriculture during the review. On the contrary, Leblond continued to be deeply involved in departmental activities both in the area of agricultural sustainability (e.g. the agri-food policy review, federal-provincial soil conservation agreements and, later, the Green Plan) and briefing senior management (and provincial counterparts) on Review Team developments. In his capacity as Associate Deputy Minister Leblond reported to the Deputy, Jean-Jacques Noreau. Leblond must be given credit for how successfully he handled the two hats. The forestry sector and, ironically, environmentalists were the only major stakeholders to formally question, for different reasons, the extent of Leblond's independence from Agriculture as Review Team chair.

Advisory Board. In this latter role, he had been instrumental in setting up the pesticide review.

Leblond and Versteeg immediately undertook to bring the pesticide registration review to life. Remarkably, the precise process for the review was still unsettled despite almost a year of preliminary planning under Wise and Mazankowski. The chair and his secretary strongly believed that policy community members had to have confidence in the process if the review was to succeed. Given the highly contentious nature of pesticide regulation (see Chapter 4), they understood that this dictated a significant amount of diplomacy on their part, but also an arena which did not encourage stakeholders to stay away because it was too threatening. This explained why Leblond and Versteeg started up another round of consultations with organizations and individuals from the policy community and were prepared, within reason, to take their views on board.

There appeared to be no ambiguity, on the other hand, about the scope of the PRR. Leblond told the Standing Committee reviewing his order-in-council appointment: the review "is not about pesticides at large and it is not about pest management...It has to be focused on the pesticide registration process."⁴¹ The Review Team's deliberations and recommendations would nevertheless subsequently

⁴¹ House Standing Committee on Agriculture. Minutes of Proceedings and Evidence. Issue No. 6. May 24, 1989, p. 6:11.

show that the battle over what exactly was under review was on-going, and critical to stakeholders' positions and therefore the outcomes of the PRR.

At the heart of Leblond and Versteeg's efforts to get the PRR up and running were fundamental questions about representation and participation. For example:

- . What sectors of interests deserved or were entitled to direct representation in the review process?;
- . Who spoke for these sectors?;
- . What sectoral balance should be struck on the Review Team?;
- . How should members of the Review Team be selected?; and
- . How could other members of the policy community participate in the PRR, for instance the general public and groups not directly a part of the Review Team?

There was one guiding principle when it came to the Review Team: its composition had to accurately reflect the diversity of perspectives in the policy community, while remaining a manageable size. The initial task for Leblond and Versteeg, then, was an analytic exercise, to carve up the policy community into generic sectors of interests. Four were identified: pesticide manufacturers, users, public advocacy groups opposed to pesticides and regulatory authorities. Some of these sectors were later subdivided, for instance the user category into agricultural and forestry users.

Designating groups or organizations as the voices for these sectors was a matter of old-fashioned politics, however. Leblond and Versteeg looked initially to "the major stakeholders with a proven track record" in the pesticide regulatory arena.⁴² But this rule broke down quickly, for several reasons.

Consider the case of the Canadian Manufacturers of Chemical Specialties (CMCS). The CMCS was the lead industry association for the non-agricultural component of the pesticide manufacturing sector. CMCS members maintained that they had distinctive concerns vis-a-vis pesticide registration, ones that set them apart from manufacturers of agricultural pesticides and therefore entitled them to their own representation on the Review Team. The CMCS sometimes illustrated this by pointing out the absurdity of subjecting toilet bowl cleaners, one of their products, to field trials, a basic regulatory requirement for agricultural pesticides. After turning down an early offer by the Crop Protection Institute to speak for industry on the Review Team, CMCS lobbied Leblond and the Review Team Secretariat for its own seat at the table.

A similar complaint came from the Canadian Medical Association (CMA), which relatively late in the organizing process took issue with the organizers' selection of the Canadian Public Health Association as the exclusive representative of the health sector. CMA officials contended that they had respected, special expertise in the

⁴² Ibid.

pesticide area and would bring a different ideological perspective to bear on the Review Team's activities. As it viewed the PRR as more than a staged exercise in consultation, the CMA was not prepared to be satisfied with making a written submission to the Review Team. The CMA case also demonstrated that intra-sector tensions, as between the CMA and the CPHA, added to the complexity of creating a multi-stakeholder review team.

A special problem confronted Leblond and Versteeg when there was no obvious candidate who could claim to legitimately represent the interests of a given sector. This applied to what the organizers called the biologics sector. As a result, once it was decided that new biological control methods (i.e. non-chemical) were an important dimension of future-oriented pesticide regulatory reform, a loose biologics pesticides caucus was manufactured, primarily out of scientists at university-based and other research centres.

The underlying issue, of course, was that status as a Review Team member equated with influence. Interests in the policy community contended - and feared - that they would have little impact on the future direction of pesticide registration if they or their delegates were not part of the Team. Leblond and Versteeg therefore continually faced the dilemma of reconciling membership size with practicality. One way they stopped the Review Team from ballooning out of control was by promising a two-tiered review process with alternative mechanisms for meaningful policy

community participation in the review. This included sectoral caucuses to support Review Team members, a period for written submissions from all interested parties and public hearings.

Relatedly, controversy swirled around the status of government interests vis-a-vis the Review Team. At the federal level, the core departments involved in registering pesticides were initially invited to nominate three delegates/members to the Review Team. There was considerable pressure from industry interests in particular that the departmental nominees be the assistant deputy ministers responsible for pesticide matters, not middle managers or working-level officials. Again, a caucus approach was agreed on by deputies to ensure that departments other than Agriculture, Health and Welfare and Environment would have input into the review (e.g. Fisheries and Oceans, Labour, Consumer and Corporate Affairs and the Office of Privatization and Regulatory Affairs).

The Review Team arrangement implied that federal bureaucrats would sit at the table as equals with non-governmental representatives of the policy community. On its face, this constituted a clear break with the conventions of parliamentary supremacy. One fundamental role of public servants in a parliamentary system of government is to tender confidential advice to ministers. By extension, federal government representatives on the Review Team were not in a position to bind their ministers to the Team's decisions, let alone to formally negotiate on their minister's

behalf. In a constitutional sense, then, federal government membership on the Review Team could not be equivalent to that of other sectors of the policy community.

The problem was that prospective Review Team members did not see eye-to-eye on this issue. The question of whether the departments' officials were members or something else simmered beneath the surface from the very start, and then became acute after October 1989 when, for various reasons, Health and Welfare and Environment increasingly sent lower-level substitutes to Review Team meetings and non-government members of the Review grew suspicious of the motives. Gradually, the federal bureaucrats shifted into an advisory relationship with the Review Team.

There was also the question of accommodating provincial (and territorial) interests in the PRR. As noted in Chapter 4, pesticides is an area of joint jurisdiction: the federal government determines which products can be bought and sold in Canada and the provinces regulate use. Provincial regulatory regimes would therefore undoubtedly be affected by the outcomes of the pesticide review.⁴³ Agreeing on an

⁴³ Provincial discontent with the overall national regulatory process for pesticides was deeply ingrained by the mid 1980s. The provincial perspective was formally reported to the Minister of Agriculture, John Wise, in a letter (dated January 2, 1986) from his colleague the Minister of Environment, Tom McMillan, writing on behalf of the Canadian Council of Resource and Environment Ministers: "[T]he present system fails to recognize the responsibility of the provinces as partners in a national management program. In [CCREM's] view, the current process has resulted in a lack of public confidence in governments' ability to manage pesticides issues." The federal pesticide ministers (from Agriculture, Environment, Health and Welfare and Fisheries and Oceans) subsequently met with CCREM in January 1987.

appropriate participatory role for the provinces and territories was a tricky business, however. In most cases the pesticide issue was classically horizontal; it was handled by several departments (e.g. a combination of Health, Agriculture and Food, Environment, Parks and Renewable Resources, Consumer Affairs and Rural Development) and sometimes up to seven or even eight (e.g. in Alberta and Nova Scotia). All told, close to 50 provincial and territorial departments were directly involved in pesticide regulation. This presented "a unique set of problems".⁴⁴ Awarding each province, let alone each of these departments, a formal seat on the Review Team would make it impossibly large. Leblond also did not want to be accused of "meddling with provincial internal affairs".⁴⁵ One option was for the provinces and territories to participate through established inter-governmental mechanisms, such as the Canadian Council of Resource and Environment Ministers and the Canadian Council of Forestry Ministers.

After strained discussions with various provincial interests, Leblond and Versteeg decided on a caucus or working group approach.⁴⁶ The pesticide

⁴⁴ Letter from Ghislain Leblond, Chair, Pesticide Registration Review Team, to Ken DesRoches, Chairman, Canadian Council of Resource and Environment Ministers and Deputy Minister, Prince Edward Island Ministry of Community and Cultural Affairs, June 6, 1989.

⁴⁵ Ibid.

⁴⁶ Leblond had earlier agreed to a 15+3 format for the Review Team, with the three members coming from the provinces. When this became known, however, the entire review process threatened to derail because certain stakeholders were prepared to withdraw from the process. Backtracking created a lot of heat from provincial pesticide officials.

departments in each province agreed to channel their positions and reactions into the review through inter-departmental committees. In return, the PRR chair gave an assurance that the Review Team would meet directly with each working group. Provincial and territorial caucuses received a continuous stream of briefing books, background documents, agendas, meeting minutes and draft reports from the Review Team.

Fifteen organizations representing six sectors were ultimately invited to nominate delegates to the Review Team. The organizations had considerable freedom to determine the details of their participation. For instance, they selected their own Review Team representatives. The organizations also assumed responsibility for managing their respective sectors, for establishing working relationships with other individuals and groups to ensure that they fairly represented the interests of their sector. Some nominating organizations also had to develop guidelines for dealing with a co-nominator. In the case of the Canadian Federation of Agriculture and the Canadian Horticultural Council, the designated voices for the farm sector, a coordinating body, the Crop Protection Advisory Committee, already existed. The situation was very different for the Canadian Public Health Association and the Canadian Medical Association, where there was long-standing tension between the organizations yet they were to speak with a common voice. Table 1 summarizes the Review Team's final composition.

TABLE 1

Composition of the Pesticide Registration Review Team*

Sector	Nominating Organization	No. of Delegates
Pesticide Manufacturing Industry	. Crop Protection Institute of Canada	2
	. Canadian Manufacturers of Chemical Specialties	1
Agricultural Users	. Crop Protection Advisory Committee of the Canadian Federation of Agriculture & Canadian Horticultural Council	2
Forestry Users	. Canadian Forest Industries Council, Canadian Pulp & Paper Association & Canadian Institute of Forestry	1
Public Advocacy Groups	. Pesticide Caucus of the Canadian Environmental Network	2
	. Consumers' Association of Canada	1
	. Canadian Labour Congress	1
	. Canadian Public Health Association & Canadian Medical Association	1
Biologics	. Biologics Pesticides Caucus	1
Federal Regulatory Departments	. Departments of Agriculture, Health & Welfare & Environment	3

* Short profiles of the nominating organizations are found in Appendix A.

Coincident with pulling together the Review Team, the management team was also setting up a small Review Team Secretariat. The nucleus of the RTS staff came from the Pest Management Advisory Board. Other officials were handpicked by Leblond and Versteeg from elsewhere in the federal bureaucracy (e.g. Finance and the Pesticides Directorate⁴⁷) and, in several instances, from outside government all together.

The Secretariat had two main functions. The first was what Versteeg called substantive issue development. This involved supplying the Review Team with background on the issues, and proposing neutral options based on the Review Team's discussions and the best available research and knowledge. The issue development function was handled by the Research Branch. The other Secretariat function was to arrange Review Team meetings, circulate draft proposals for comment, process travel expenses, organize public hearings, manage consulting contracts and otherwise keep the administrative aspects of the process running smoothly.

One of the Secretariat's first activities was to prepare a proposed list of issues for the Review Team to take on in its study of the registration system. To do this,

⁴⁷ In keeping with its general posture vis-a-vis the pesticide review, the Pesticides Directorate was extremely reluctant to second officials to the RTS. Leblond had to use all his negotiating skills and status as an Associate Deputy Minister in order to borrow the few staff resources that he did. The other core departments were no more prepared to help staff the Secretariat. Various confidential interviews.

RTS staff canvassed the core departments, stakeholders and previous research on pesticide registration. The list which emerged, with 15 to 19 items, was considered by the Review Team at its first meeting and essentially set the issue agenda for the PRR.

The Secretariat was equally instrumental in establishing a working relationship between the Review Team and one of its key information resources, the Pesticides Directorate. Official positions from the Department of Agriculture and the PD were conveyed to the Review Team through the Department's representative on the Review Team, the Assistant Deputy Minister of the Food Production and Inspection Branch.⁴⁸ However, the Review Team's ability to address its issue agenda depended on having access to expert, first-hand knowledge in the Directorate. It was eventually agreed that requests from the Review Team (and its Secretariat) would be treated as "priority items, after the Minister and Deputy Minister, but before [registration-related] submissions and other normal operations." For each of the 20 issues, a PD contact was designated.

⁴⁸ That is, the Assistant Deputy Minister responsible for the Pesticides Directorate.

2.2 Getting Down to Business

The Review Team met for the first time on June 1st, in Ottawa. The prime order of business was finalizing the Team's terms of reference. Table 2 shows the purpose settled on, as well as the 20 issues to be examined. At the top of the Review Team's list of issues: "the locus of the federal decision-making authority for regulating pesticides".

At five meetings over the course of the next six months, the Review Team concentrated on developing a strategy for satisfying its self-defined mandate. It was agreed that the over-riding goal was to achieve consensus support for a total package of recommendations. While individual delegates and/or their caucuses might be reluctant to approve a particular reform, ideally they would all be able to sign-on to the final report to the Minister.

Leblond's advice was that consensus could only be achieved if Team members were prepared to bargain. Given the long history of adversity in the pesticide policy community, he said, neither fact-finding nor polite discussion alone could ever prove productive. The Team consequently approved an explicit exercise in negotiation. This meant that the report to the Minister would be a negotiated outcome, with all members submitting formal positions on each recommendation and their conditions for accepting the report as a whole. As it happened, the process of negotiation took place

TABLE 2

The Review Team's Terms of Reference

Purpose:

Recognizing the principles of sustainability, the purpose of the Review Team is to formulate recommendations for the Minister of Agriculture to adapt the pesticide registration process to changing policies and conditions with a view to ensuring the efficient federal regulation of pest control products that minimize the risk of harm to human health, safety and the environment while meeting the needs of the stakeholders.

Issues:

- 1) The locus of the federal decision-making authority for regulating pesticides.
- 2) The extent and cause of backlogs in registering new products.
- 3) Effectiveness of the existing Minor Use of Pesticides Program.
- 4) The role of risk management principles in making regulatory decisions.
- 5) The criteria used to assess the human health and environmental impacts of pesticides.
- 6) The role of the public in the registration process.
- 7)
 - a. Regulation of alternatives to traditional synthetic control products.
 - b. Within the regulatory process, incentives for safer, more effective and more economical alternatives to traditional synthetic pest control products.

- 8) The interim registration policy, Product Specific Registration II.
- 9)
 - a. Pricing.
 - b. Availability of pest control products.
- 10)
 - a. Coordination and cooperation between Canada and the United States.
 - b. Schedule 7 to the Canada-U.S. Trade Agreement.
- 11) Coordination and cooperation with the provinces.
- 12) Coordination of the Pest Control Products Regulations with the Workplace Hazardous Materials Information System.
- 13) Temporary registrations.
- 14)
 - a. Appeal procedures.
 - b. Cancellation and suspension provisions of the regulations.
- 15) Reevaluation, including the classification scheme.
- 16) Enforcement program and penalty provisions.
- 17) Research permits.
- 18) Labelling.
- 19) Ongoing review mechanisms to ensure that the regulatory process can adapt quickly and fairly to changing needs and conditions.
- 20) Federal record-keeping.

on two planes: around the Review Team table, and also between meetings with the Secretariat often acting as a sensor and informal mediator between the parties.

The June to December meetings also produced the basic test to be applied by the Review Team to each of its recommendations. The fundamental criteria was viability. Viability had three major dimensions: political, bureaucratic and fiscal. In addition, Review Team members - at the chair's insistence - agreed that decisions had to be reached through a fair and reasonable process. The implications of choosing a mode for regulation using viability as the test are examined in-depth in Chapter 6.

Another important ingredient of the Review Team's strategy was the way Team members decided on relating the substantive issues to a reformed pesticide registration system. The original plan was to visit each of the 20 issues on the Team's list in turn so that members had a common baseline of knowledge, and then revisit the issues with a view to developing a consensus position on each. As the Review Team soon discovered, however, this was overly ambitious. It was also of dubious benefit because broad principles risked being ignored.

The Review Team adjusted its approach in early autumn 1989. The focus would no longer be on the rooms, but rather designing a house - in other words, identifying the characteristics of an ideal pesticide registration system and then analyzing the 20 issues within the parameters of this general conceptual framework.

Review Team members were persuaded that the designing-the-house approach was less likely to be stalemated by inter-stakeholder disputes and, therefore, more likely to produce consensus.

Several Review Team meetings were devoted to developing and refining a principles-based conceptual framework. In the end, Team members agreed that the registration system recommended to the Minister of Agriculture would have to:

- 1) be open;
- 2) protect health, safety and the environment;
- 3) be accountable, responsible, efficient, /fair and equitable;
- 4) be responsive and adaptive;
- 5) increase access to alternative pest management strategies; and
- 6) support the development of policies that assist economic viability and the competitiveness of Canada's farm, forestry and fishery sectors.

The Review Team's revised working strategy involved matching each of these six fundamental principles to mechanisms for achieving them. Locus, the question of who should make regulatory decisions, was considered to be a mechanism for achieving principles 3, 4 and 6.

The final major question to be resolved by the Review Team was how to incorporate other members of the policy community in the review process. A first round of public participation got underway in August. The Review Team sent out a newsletter calling for written submissions from interested individuals and organizations on the 20 issues. Briefs received by December would be taken into account in the

Review Team's drafting of a preliminary report. Over 165 met the deadline. The Review Team also sought initial input from the provincial and territorial working groups during this period.

Most times the Review Team met as a whole to discuss the issues, consider options and negotiate and decide on their recommendations. Three sub-committees were struck to do preliminary work on several issues, however. These issues tended to be ones that Review Team members anticipated would be difficult to resolve in the time available, either because of a shortage of information or irreconcilable stakeholder positions.⁴⁹

2.3 The Preliminary Report

The Review Team released its preliminary report "for consultation" in July 1990.⁵⁰ The report was the end-result of negotiations around ten earlier versions. The usual procedure was for the Secretariat to assemble a draft set of recommendations based on Review Team meetings and bilateral discussions with

⁴⁹ Three sub-committees were established, on: alternatives and temporary registration; pricing and availability and reevaluation; and risk management and the public's role in the registration process.

⁵⁰ Canada. Pesticide Registration Review Team. A Proposal for a Revised Federal Pest Management Regulatory System (Ottawa: July 1990).

individual members and sometimes outside experts; the proposed recommendations were then circulated to Review Team members (and through them to their caucuses) and then evaluated at the next Review Team meeting. Gradually, as areas of agreement came together, the Team concentrated on finding acceptable compromises on the outstanding issues.

For the dissertation, the key recommendation in the Team's preliminary report was found in the section dealing with administration, and in particular the question of what the Review Team called locus.⁵¹ The centrepiece of the preliminary report was a new Pest Management Act. The Review Team proposed that responsibility for regulatory decision-making under the Act be shared by the Ministers of Environment, Health and Welfare and Agriculture. Intriguingly, it was recommended that only the Minister of Agriculture handle the PMA's administration, through a Pest Management Bureau. The Review Team's proposed mode reforms also included an inter-departmental committee of directors-general. The Pest Management Committee, as it was named, would "reach consensus on regulatory decisions to be submitted to the Ministers for their approval".⁵²

⁵¹ See ibid., pp. 9-10. The Review Team's locus concept is examined in detail in Chapter 6.

⁵² Ibid., p. 10.

The Review Team's interim report was the focal point for a second round of public consultation.⁵³ In the autumn of 1990, Review Team members once again solicited written briefs, this time in response to the specific recommendations in the July report. Approximately 475 were submitted.⁵⁴ The Review Team also conducted hearings at major cities across the country in September and October 1990.

2.4 The Final Report

After 21 meetings held over 18 months and about a dozen draft sets of recommendations in total, the Review Team presented its final report to the Minister

⁵³ For reaction to the Review Team's preliminary report see, e.g., Tom Button, "Pesticide Powers Key to Hearings," Farm and Country, September 18, 1990, p. 18; "Farmers Want Say in Spray Control," Farm and Country, September 18, 1990, p. 19.

⁵⁴ By the end of its mandate the Review Team had received close to 650 written submissions from over 550 organizations. These submissions came from a wide range of individuals, organizations and governments and expressed an equally wide range of views on some or all of the Review Team's 20 issues, and other matters as well. It is interesting that several of the core federal departments, one of the caucuses directly represented on the Review Team (the Forestry Pesticides Caucus) and a number of organizations which had delegates on the Review Team chose to submit written briefs to the Review Team. This raises the question of whether these interests had doubts about the extent of their influence on the Review Team's recommendations and therefore reinforced or bypassed the other pre-set channels (e.g. under the Review Team format, assistant deputy ministers from the core departments and the federal caucus were supposed to articulate official departmental positions). From a more theoretical perspective, this may suggest important limits on the representative capacity of Review Team-like exercises in regulatory reform.

of Agriculture Don Mazankowski on December 22, 1990.⁵⁵ All members but one had signed-on, signalling that they and their caucuses had found the total package of recommendations acceptable. The dissenting voice, from the labour representative, appeared as a carefully-negotiated appendix to the report. Despite the original plan for a review by stakeholders from inside and outside government, the report gave no reason for a casual observer to think the core federal departments had participated. Their contribution as "advisors [...] who gave of their special knowledge, ideas and time" was mentioned only in passing in the Review Team's acknowledgements.⁵⁶

The Review Team's final report included a very different set of recommendations about the mode for regulation than had the interim July report. As before, the Team proposed replacing the old Pest Control Products Act with a Pest

⁵⁵ Canada. Pesticide Registration Review Team. Final Report: Recommendations for a Revised Federal Pest Management Regulatory System (Ottawa: December 1990). The report is described and assessed in detail in Bill Deen and Glenn Fox, "An Overview of the Proposed Federal Pest Management Regulatory System," a discussion paper, George Morris Centre, University of Guelph, December 19, 1991. For more general public reaction to the Review Team's report, see: Tom Button, "Report Gets Mixed Reviews," Farm and Country, January 15, 1991, p. 10; "Chemical Chaos" and "Backgrounder", Agriweek, January 14, 1991; "Backgrounder," Agriweek, January 28, 1991; Martin Mittelstaedt, "Panel Wants Pesticide Use Cut Back," Globe and Mail, January 7, 1991; "Le rapport federal sur les pesticides seme le doute," La Presse, January 4, 1991; "Report of the Pesticide Review Team: AGCare Position," Ontario Corn Producer, 1991 Special Issue; Jim Romahn, "Pesticides Report Deserves Award," Kitchener-Waterloo Record, date?; Heather Saranpaa, "Pesticide Panel Would Create New Regulatory Agency," Seasons, spring 1991, pp. 12-13; and Barry Wilson, "Ottawa Told to Revamp Pesticide System," Western Producer, January 3, 1991.

⁵⁶ Pesticide Registration Review Team, Final Report, p. vii.

Management Act. The mode arrangement for the regulatory system now, however, hinged on:

a self-contained Pest Management Regulatory Agency [PMRA]. It will report directly to the Minister of Health and Welfare [...], but will be separate from the Department of Health and Welfare as well as from any other federal department or agency."⁵⁷

The Review Team recommended giving the Agency virtually all regulatory responsibilities under the **PMA**. Many of these were specifically enumerated in a description of the PMRA's role.

The other important aspect of the Review Team's mode proposal was concern that the PMRA be able to carry out its assigned functions, effectively and efficiently. One route recommended was for the Agency to have separate sections to fulfill the different parts of its mandate, namely: audit and enforcement; information and communication; policy development; and product management. The Review Team also warned the Minister that the PMRA had to have access to "sufficient funding".⁵⁸ Finally, the mode framework in the December 1990 report included provision for administrative work-sharing agreements between the Agency and federal departments "on matters of mutual interest".⁵⁹

⁵⁷ **Ibid.**, p. 5.

⁵⁸ **Ibid.**, p. 6.

⁵⁹ **Ibid.**, p. 7.

3.0 THE PESTICIDE REGISTRATION REVIEW, 1991-92

The third stage of the pesticide review got underway in early 1991. There was a single over-riding purpose: to formulate a federal government response to the Review Team's recommendations. Section 3.1 focusses on the leadership role played by the Pest Management Working Committee. The inter-departmental process directed and overseen by the Committee is examined in Section 3.2. The last section of the chapter describes the major outcome of the PRR's third stage, an announcement by the government in February 1992 of a revised regulatory regime for pesticides.

3.1 Formulating a Government Response: The Pest Management Working Committee

The Minister of Agriculture committed to an independent assessment of the regulatory regime recommended by the Review Team soon after receiving its final report in mid December. The report implied major changes in the roles of at least four federal departments in regulating pesticides. This suggested that not only the Minister of Agriculture, but also three of his Cabinet colleagues, the heads of the core advisory departments, were entitled to be involved in the evaluation process. When a response finally came to the Review Team's report, in February 1992, it therefore

officially came from the Cabinet as a collective entity rather than the Minister of Agriculture alone.

The job of "coordinat[ing] formulation of the government response" was a special project assigned to the newly-appointed director of Agriculture's Bureau for Environmental Sustainability (BES), Avrim Lazar. Lazar established a very small Pest Management Working Committee (PMWC). This committee consisted of fewer than a dozen analyst-level officials who joined the BES from elsewhere in the federal bureaucracy (e.g. the Public Service Commission, the Auditor General's Office and the Pesticides Directorate). Most had special expertise at central agency functions, such as managing inter-departmental processes, preparing memoranda to Cabinet and drafting submissions to Treasury Board.

Creation of the Pest Management Working Committee marked another transition point in the pesticide review. The Minister of Agriculture and his deputy remained acutely sensitive to keeping the pesticide review exercise at arm's-length from the regulators. This explained why a team of outsiders was brought in to independently assess the Review Team's report. However, the break with the previous phase of the PRR was not complete. Hajo Versteeg, the former head of the Review Team's Secretariat was actively involved on the Working Committee. The Bureau for Environmental Sustainability furthermore fell under the direct jurisdiction of the Associate Deputy Minister of Agriculture, Ghislain Leblond.

The PMWC had one central goal, to propose a government response to the Review Team's final report. The assessment process involved:

- . gauging non-governmental reaction to the regulatory system proposed by the Review Team;
- . determining the legal, operational, organizational and resource implications of implementing the Review Team's various recommendations; and
- . convening the core pesticide departments to assess their reaction to the Review Team report and to alternative options for the regulatory regime.

On this basis, the PMWC prepared a memorandum to Cabinet (MC) on pesticide regulatory reform.

The PMWC's litmus test, as Lazar later explained to the House Standing Committee on Agriculture, was implementability. The regulatory regime recommended to Cabinet had to be affordable and practical, and it had to be one that all relevant ministers would be prepared to make the necessary concessions on. Moreover, the PMWC separated the policy dimensions of the Review Team's report - and the government's response - from matters of administration. Lazar described the PMWC's evaluation procedure in this way:

The process we put in place came from two considerations. First, we figured out whether or not we could make [the Review Team report] work. Second, we figured out whether or not we could afford it. The decision was tentatively reached relatively early. It was not to try to second guess the review team on the substantive policy directives after that

degree of consultation. There was a consensus of such diverse interest that we didn't wish to redo the work of the review team merely to look at its administrative feasibility. We also had to ensure that it was consistent with other government policy directions.⁶⁰

There were two basic administrative issues for the Working Committee: cost and the machinery of government. Lazar reported that these took "considerable time to resolve between departments."⁶¹

3.2 Inter-Departmental Debate

The third phase of the pesticide review was almost exclusively an inter-departmental process. The major players, besides the Working Committee, were the departments of Agriculture, Health and Welfare, Environment, Forestry, Fisheries and Oceans and Justice, as well as the Treasury Board Secretariat and the Privy Council Office. The first five were all de facto regulators in the existing regulatory framework. Justice and the Privy Council Office advised the PMWC on the legal, organizational and political aspects of the government's response. Treasury Board (and the Department of Finance) controlled the regulatory regime's access to financial and personnel resources.

⁶⁰ House Standing Committee on Agriculture. Minutes of Proceedings and Evidence. Issue No. 26. March 10, 1992, p. 26:8.

⁶¹ Ibid.

The inter-departmental debate was generally "collegial and in good faith".⁶² Nevertheless, departments articulated carefully crafted arguments in defense of their own best interests, and their minister's. The most controversial issue was the Review Team's recommendation for an independent Pest Management Regulatory Agency. This was also the major area where departments tended to hold deeply entrenched views. Not surprisingly, then, the PMWC had significant difficulties rallying departmental officials to a common mode position. Chapter 7 analyzes this aspect of the pesticide review in detail.

The cost question was nearly as divisive as the PMRA. All parties in the inter-departmental arena agreed that successful implementation and operation of the Cadillac regulatory regime recommended in the Review Team's report depended on a critical infusion of new resources. Resources, however, were the scarcest commodity in Ottawa by the 1990s.

The Working Committee looked at several options for circumventing this dilemma. The first called for reallocating existing dollar and person-year budgets. Resources could be channelled into the pesticide regulatory system from other programmes either at Agriculture Canada or at other departments, most likely Agriculture's pesticide advisors. Accessing so-called "new" resources was another possibility. On this front, the Green Plan was the only major source of funds besides

⁶² Confidential interview.

the special reserves managed by Treasury Board and the Department of Finance. The third approach was to shift from focussing on finding resources to creating an effective registration system with fewer bells and whistles. In other words, scaling down the Review Team's Cadillac regulatory system to a much more modest Volkswagen bug.

The cost debate was all about bureaucratic politics. At the macro level, departmental reaction to the Review Team's proposed regulatory system manifested the problem of satisfying stakeholder pressures for more stringent regulation without undermining the Conservative's policy of restraint in government. At the micro level, the issue was about winners and losers, about which departments would bear the financial and personnel costs of any changes to the status quo and in what proportions.

Inter-departmental wrangling had earlier wrecked havoc with the Review Team's attempts to determine the resource requirements for various alternative registration systems (see Chapter 6). The Pest Management Working Committee knew that removing this cloud was pivotal to manufacturing any fragile consensus amongst departments. Officials at the Pesticides Directorate and in the core advisory departments were consequently directed to review their resource projections. The Working Committee then examined the departments' figures with a fine-toothed comb to determine how reasonable they were. As Chapters 6 and 7 explain, the cost issue was wrapped up in the mode outcomes of the pesticide review.

Consultation with the non-government sector of the policy community was kept to a minimum during this last stage of the PRR. Officials on the Working Committee met with outside groups from time-to-time to simply keep them abreast of the direction in which the government's response was moving. The PMWC consciously refused to get involved in renegotiating the Review Team package.

3.3 The Federal Government Response

After a long delay during which the government was accused of fumbling the pesticide issue,⁶³ the PMWC's draft memorandum went before the Cabinet Environment Committee in the fall of 1991. On November 26th, it became official government policy when it was approved by the Priorities and Planning Committee.

The government went public with its response to the Review Team report on February 3, 1992.⁶⁴ Four ministers - Bill McKnight, who had taken over from Mazankowski as Minister of Agriculture in May 1991, Frank Oberle, the Minister of

⁶³ See, e.g. Barry Wilson, "Ottawa Under Increasing Pressure to Change Pesticide System" Western Producer, December 5, 1991, p. 5. Complaints about the delay were also voiced at the House Standing Committee on Agriculture's hearings on sustainable agriculture at the end of 1991, in letters to Mazankowski, now Minister of Finance, and by the Liberal agriculture critic in the Commons.

⁶⁴ The former members of the Review Team were briefed in advance about the government's response, at a session in Ottawa on February 2nd.

Forestry, Jean Charest, the Minister of the Environment, and Benoit Bouchard, the Minister of Health and Welfare - announced Cabinet's policy decision to "enhanc[e] protection of human health and the environment while ensuring access to effective pest management tools." To this end, there was a promise for an "improved regulatory system for pesticides". The pillar of this system would be more resources, over a six-year timeframe:

- . \$81-million to implement many of the reforms recommended by the Review Team.⁶⁵ This money would come from the Green Plan and existing core department reference levels.⁶⁶
- . An infusion of approximately 250 person-years, to a total of 450-460.

The government's plan also called for operating costs for the overall federal pesticide regulatory system to jump to \$49-million per year, up from the current level of \$18-million.⁶⁷

⁶⁵ The government claimed at the end of February that it was implementing 23 of the Review Team's 27 major recommendations "without substantive modification" and was going ahead with "the thrust of the remaining 4".

⁶⁶ The government's February 3rd press release announced that the \$81-million would be split 75%:25% between the Green Plan and the core departments. Within a few months, however, the cost sharing arrangement had shifted to 60%:40%. See Canada. House of Commons Standing Committee on Agriculture. Minutes of Proceedings and Evidence, Issue No. 37, April 28, 1992, p. 37:4.

⁶⁷ For a sample of reaction to the government's revised regulatory framework see: Alex Binkley, "Agency to Help Limit Chemical Pesticide Use," Ottawa Citizen, February 9, 1992, p. E4; Larry Kusch, "Pesticide Plan Peeves Farmers," Winnipeg Free Press, February 5, 1992, p. B18; Jim Romahn, "Ottawa Messes Up Pesticides Study," Kitchener Waterloo Record, February 11, 1992, p. G7; and Barry Wilson, "Shaky Response to Pesticide Plan," Western Producer, February 13, 1992, p. 19.

The key feature of the government's improved regulatory system for the purposes here was the rejection of the proposed independent Pest Management Regulatory Agency. Instead, Cabinet approved a vaguely defined inter-departmental model for the registration system, with regulatory responsibility continuing to reside with the Minister of Agriculture but with "strengthen[ed] and clarif[ied]" roles for Health and Welfare and Environment Canada. The Cabinet decision did not prescribe how the model would operate. That task was assigned to a soon-to-be-established Pest Management Secretariat attached to Agriculture Canada and, indirectly, also to the core departments.⁶⁸

4.0 SUMMARY

Chapter 5 chronicled the federal pesticide registration review. It was useful for the purposes of examining choices about the mode for regulation to divide the review into three phases: 1988 to spring 1989, spring 1989 to December 1990, and 1991 to February 1992. As the three sections in the chapter explained, each of these periods corresponded with a clearly identifiable part of the review's mode story.

⁶⁸ The Pest Management Secretariat was set up to implement the government's response to the Review Team report. The Secretariat continues (as of October 1994) to provide support and coordination functions for a new Interdepartmental Executive Committee on Pest Management, an Advisory Council on Pest Management, a federal-provincial committee and an inter-departmental committee of directors-general on implementation.

The agenda-setting stage of the pesticide review lasted from 1988 to the spring of 1989. Section 1.0 argued that the interests of four segments of the policy community - agricultural producers, the pesticide manufacturing industry, the minister and deputy minister of agriculture and environmentalists - converged in favour of a sweeping review of Canada's pesticide registration system immediately following alachlor. The strongest resistance to a review came from regulatory officials, especially Agriculture Canada's Pesticides Directorate. The PRR finally got off the ground in March 1989. This was only after Don Mazankowski had resumed the post of Minister of Agriculture and took command of pesticide regulatory reform.

The Review Team phase of the PRR, covering from the spring of 1989 to the end of 1990, was the topic of Section 2.0. The novelty of the regulatory reform process presided over by the Pesticide Registration Review Team justified discussing this stage in comparative detail. Therefore, Section 2.1 dealt with the Team's composition and the supporting management team and administration; and Section 2.2 described how the Team went about fulfilling its mandate. The Review Team submitted a report to the Minister of Agriculture in December 1990. As Section 2.4 emphasized, this report included the dissertation's first choice of mode for regulation: an independent agency-based mode with adequate funding as well as provision for inter-departmental work-sharing agreements.

The last, third stage of the pesticide review centered on the formulation of a government response to the Review Team's proposed regulatory regime for pesticides. Section 3.0 showed that this was primarily an inter-departmental process. The process was coordinated by a Pest Management Working Committee which operated out of Agriculture Canada's Bureau for Environmental Sustainability, but which was empowered to undertake an independent assessment of the Review Team report. Inter-departmental conflict coalesced around two issues: the resources available (or not available) for making improvements in the pesticide registration system and the mode for regulation. Section 3.3 described the federal government's ultimate mode choice, a revised status quo. This choice is the dissertation's second dependent variable.

Chapter 6

MICRO ANALYSIS: THE CHOICE OF MODE FOR REGULATION #1

The next two chapters in the case study shift the level of analysis down to the micro aspects of the federal pesticide registration review. As described in Chapter 5, "the locus of the federal decision-making authority for regulating pesticides" headed the list of issues. This chapter analyzes the Review Team's final recommendation for an independent Pest Management Regulatory Agency using the three-part framework of interest politics, mode paradigms and decision styles.

Basically the same format is followed here and in Chapter 7. Section 1.0 sketches a chronology of the 1989-90 mode choice and introduces several of the key developments pursued later in the chapter. The Review Team's choice of an agency-based mode is then explained, in Section 2.0, as the product of interplay amongst the dissertation's three independent variables.

The analysis in Section 2.0 shows that agency supporters in the policy community were unable to determine the mode choice. There were a number of contributing reasons, many of which related to the knowledge base for a rational choice about the mix of structure, resources and processes and to elasticity in the concept of regulation by agency. Another important factor was that the mode for

regulation became a highly charged political-administrative issue at the interface of insiders and outsiders. The section goes on to explain that mode paradigms in the policy community, for the most part, continually evolved and pushed outward; however, attitudes towards participation and the norms of government (re)organization in parliamentary regimes were both deeply rooted and highly contentious. At the end of the day, the negotiation-centered decision style assured the essential compromise quality of the first mode choice in the pesticide review.

Finally, the 1989-90 period had many layers of rich, structured activity. This is reflected in the highly detailed analysis presented in this chapter. The situation in 1991-92 was very different, with implications for the approach to analysis in Chapter 7.

1.0 THE REVIEW TEAM CONFRONTS THE MODE FOR REGULATION

The mode choice in the 1989-90 Review Team phase of the pesticide review is investigated in this section. The analysis starts, in Section 1.1, with a brief look at the Review Team's initial perspective on the mode for regulation. Section 1.2 then summarizes the major developments leading up to a choice by the Review Team of a new agency-based organizational arrangement for pesticide registration. Detailed attention is paid to six crucial Review Team meetings and the mode-related proposals

that emerged from them. These meetings stretched from December 1989 to the end of 1990.

1.1 Scoping Out the Mode for Regulation

The briefing book prepared by the Review Team Secretariat in May and June 1989 gave the newly-appointed members of the Review Team a first glimpse at what is considered here the problem of choosing a mode for regulation. Several members had been casually exposed to the mode issue beforehand. For most, it was virgin territory.

The mode for regulation was dealt with in the briefing book under the title "locus", a term adopted by the Secretariat as shorthand for the formal site of decision-making authority for regulating pesticides in the federal government.¹ A one-page synopsis established a common baseline of knowledge. This was the Review Team's point of departure for making a choice about the mode for pesticide registration.

¹ Credit for coining the locus term in the regulatory context should go to the Regulatory Affairs Branch of the federal Office of Privatization and Regulatory Affairs. RAB's role in choosing a mode is examined below in the text. Locus is another instance where regulation has borrowed from legal studies.

The briefing book presented locus as relating to four of the other 20 issues within the Review Team's mandate:

- . backlog;
- . pricing and availability;
- . coordination and cooperation between Canada and the United States and the Free Trade Agreement; and
- . on-going review mechanisms.

The major shortcomings said to be associated with the existing mode for pesticide registration echoed those discussed previously in Chapter 5:

- . a conflict of interest or bias on the part of the Minister of Agriculture;
- . different mandates for each of the four core departments involved in registering pesticides; and
- . inconsistent, slow and inefficient decision-making.

Nor was the locus page silent about options. Five were listed:

- . the status quo;
- . an improved status quo;
- . a stand-alone agency
- . joint authority; and
- . relocation of primary regulatory authority.

The briefing book left detailing the problems and possible solutions to the Review Team. The planned deadline for a decision on locus was May 1990.

The initial locus snapshot embodied a structure-based conception of the mode for regulation. This was consistent with a literal translation of the Review Team's terms of reference where the focus was on the formal location of decision-making authority and accountability/responsibility. Over the longer term, the meaning of

locus underwent remarkable transformation in the hands of the Review Team and, later, federal officials. This chapter and the next explain that the process of choosing a mode for pesticide registration took place in the context of an increasingly rich but highly controversial interpretation of the mode concept itself.

From a macro perspective, the briefing book implied a key difference between the locus question and many of the other 19 items up for consideration by the Review Team. What appeared to set locus apart was the absence of a strong policy dimension. Consider the criteria and methodology used in evaluating pesticides (e.g. Issues 4 and 5; see Table 2 in Chapter 5), program effectiveness (e.g. Issue 3) and harmonization with foreign regulatory regimes (Issue 10). Most participants in the pesticide review took for granted that dealing successfully with these items required fundamental value judgements and weighing competing interests. Each was in a sense, then, a classic policy issue. Locus conjured up an utterly dissimilar set of images as painted in the briefing book - of public administrative structures and accountability relationships, and potentially "shuffling the boxes" of government organization.² In this regard locus had more in common with determining the causes of registration system backlogs (Issue 2) and federal record-keeping (Issue 20).

The Review Team Secretariat began to collect data on the mode issue from the core departments in August 1989. Designated departmental officials were surveyed

² Szanton, "So You Want to Reorganize the Government?", p. 27.

about the current assignment of regulatory authority and existing administrative practices between and within departments. Reaction was sought to several potential reforms, including the idea of "an interdepartmental agency".

As discussed in the previous chapter, the Review Team's strategy was to design an "ideal" regulatory system. It was agreed that the mode, or locus, would be considered a mechanism for achieving three of the basic principles undergirding this system: that the system be accountable, responsible, efficient, fair and equitable; that it be responsive and adaptive; and that it support the development of policies that assist economic viability and the competitiveness of Canada's farm, forestry and fishery sectors.

1.2 Critical Events and Developments: A Synopsis

On the surface, the opening phase of the pesticide review was a curious mix of Review Team meetings, studies from the federal advisory officials and outside consultants and submissions from the policy community. Neatly interwoven was a parallel process of report drafting managed by the Review Team Secretariat. This section describes the major developments as they related to the Review Team's choice of a mode for pesticide registration. In hindsight, the choice of an independent Pest

Management Regulatory Agency linked directly with a half-dozen specific meetings and the proposed recommendations they generated.

The Review Team's first full-fledged discussion of the organizational model for an ideal pesticide regulatory system took place in mid December 1989. The basis for this discussion was a report tabled by the environmental representatives, Marilyn Kansky and Toby Vigod. No particular locus for regulatory responsibility was singled out in the report; however, Kansky and Vigod argued strongly in favour of replacing the Pesticides Directorate. This was a clear-cut sign to the policy community that the prevailing mode arrangement would be carefully scrutinized in the pesticide review.

The report from the environmental sector was premised on - and advocated - a particular conception of the Review Team's mandate. This was that the Review Team would propose a pest management policy for Canada, not simply recommend marginal adjustments in the registration system.³ The Kansky and Vigod study was never formally endorsed by the Review Team; it nonetheless planted the seed for the idea of functional differentiation. The Review Team's subsequent deliberations assumed that there were two distinct pesticide-related roles for the federal government: registration, and policy and research on pest management.

³ As observed in Chapter 5, competing positions on the scope of the pesticide review caused serious conflict amongst the core departments, and between the departments and Review Team members.

There was a natural corollary to differentiating governing functions. Kansky and Vigod's report accordingly hinted that the organizational framework for the pesticide regulatory system ought to be based on separate responsibility centres for registration on the one hand, and policy and research on the other. This, in turn, seemed to lead to two distinct sets of government machinery.

The debate initiated by Kansky and Vigod carried over to a late January 1990 meeting between the Review Team and representatives of the provincial and territorial working groups. From several points of view, this meeting was a microcosm of the overall mode choice process in stage one of the PRR.

Of chief interest was the extent of sympathy for an agency-based mode for regulation. Meeting participants generally accepted that what they vaguely referred to as a "stand-alone agency" could "solve some of the problems" associated with the existing distribution of formal and administrative responsibility.⁴ There was markedly less consensus on what this agency would look like. Minutes from the meeting support the conclusion that "stand-alone agency" was used with very little precision, almost to the point that the term could not possibly have any real meaning.

⁴ As recorded in the official minutes of the Review Team meeting, January 28-29, 1990.

The confusion manifested itself in at least two places. First, there was the proposition that decision-making authority be "divided equally among all departments involved in the agency".⁵ The spectre of any kind of departmental involvement defied the academic perspective that departments and agencies are separate classes of organizational forms, with the latter often specifically created for the purposes of insulating decision-making from the former's influence. The second area of ambiguity concerned the U.S. Environmental Protection Agency. The EPA was almost blindly embraced by both Review Team members and provincial/territorial officials as "a model for bringing all [pesticide] experts under one roof".⁶ Yet, at the same time, there was a measure of appreciation that the EPA arrangement could not be transplanted north of the border without modification. As the meeting minutes recorded, "the decision-making authority in Canada [would] have to report to a minister."⁷ There was nevertheless a certainty buried deep beneath all the mixed messages. Two separate and distinct sets of organizational arrangements were on the drawing board.

The conspicuousness of the mode issue was due in part to the meeting's bureaucratic make-up. For government pesticide officials, the principle that regulatory responsibility must be formally assigned by statute to a locus, whether that

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

be an agency or a minister, was part and parcel of the operating environment.

Moreover, this subset of the policy community was a natural information resource for the Review Team. Pesticide officials were at a minimum bound to have experiential expertise relevant to the Review Team's task of designing a regulatory system.

Persuasive collaborating evidence that the provincial and territorial working groups were disproportionately preoccupied with the choice of mode for regulation (compared to other policy community sectors) could be found in the written briefs submitted to the pesticide review.⁸

As intended, locus was the major agenda item at the Review Team's February 1990 meeting. The Secretariat had, back in August, invited the Regulatory Affairs Branch of the federal Office of Privatization and Regulatory Affairs (RAB) to prepare a background document on the "positive and negative aspects of the current regulatory structure and the positive and negative aspects of viable alternatives to the current

⁸ Twenty provincial and territorial regulatory authorities submitted 25 briefs to the Review Team (out of a total of close to 650 briefs received by the Review Team in all). Unlike the pattern in other sectors of the policy community, the submissions were distributed fairly evenly between the pre- and post-preliminary report periods of consultation. Most of them came from the official working groups. There was almost unanimous agreement amongst these interests on the desirability of an independent regulatory agency for federal pesticide registration/regulation. The situation for other groups in the policy community is discussed later in the chapter.

structure".⁹ The ensuing locus paper was the main topic of discussion in February.¹⁰

Many Review Team members were extremely frustrated with the lack of sensitivity to practical detail in RAB's report.¹¹ Several important conclusions nonetheless emerged. Chief amongst these was that complaints about the existing registration system often owed more to the decision-making process than *locus per se*, regardless of how they were couched. This cast a new light on the organizational design issue. The priority for the Review Team shifted, from deciding who should hold regulatory responsibility to setting up a registration system that reduced tension between the lead regulators, Agriculture, Health and Welfare and Environment. Redrawing the review's locus item in turn implied a broader range of possible organizational arrangements. Accordingly, the Review Team began to look seriously for the first time at co-location (i.e. moving all pesticide regulatory officials under a single roof), and an electronic monitoring system and inter-departmental committees to consolidate input from the advisory departments.

⁹ Letter from Hajo Versteeg, Executive Secretary, Pesticide Registration Review Secretariat, to Tony Campbell, Assistant Deputy Minister, Office of Privatization and Regulatory Affairs, August 11, 1989. The Regulatory Affairs Branch was invited to examine another Review Team issue as well - coordinating the Pest Control Product Regulations with the Workplace Hazardous Materials Information System (otherwise known as WHMIS) - but declined.

¹⁰ Joel Saltsman and Margaret M. Hill, "Discussion Paper: A Locus for Pesticides Registration," Office of Privatization and Regulatory Affairs, Government of Canada, Ottawa, February 1990.

¹¹ Various confidential interviews.

The February meeting also introduced the Review Team to the normative dimensions of choosing a mode for regulation. Regulatory Affairs' background paper, reinforced by ensuing interventions from the core department advisers, delivered a crash course in the traditions of parliamentary government, especially the principle of ministerial responsibility and its spin-off, the minister-headed department. Whether they approved or not, members of the Review Team were henceforth on notice that an appropriate degree of reverence was expected as they went about designing a new registration system.

In the other major development, the option of an agency-based mode for registration lost some of its lustre following February's meeting. The Review Team gradually acknowledged that freezing the core departments out of the registration system was probably impossible because the Ministers of Health and Welfare and Environment were irrevocably linked in the public's mind with the pesticide issue and therefore would continue to be held accountable (in a practical sense) in parliamentary debate. Under any agency scenario, then, the registration system would actually have an additional federal player, not fewer. The Review Team also learned that an agency risked losing access to departmental expertise currently used part-time for pesticide registration.

This latter message marked a subtle change in tenor in the 1989-90 mode choice. RAB had cautioned Review Team members about the financial implications

of revising the mode for registration. The core federal advisers were more blunt. From them came a dire warning at the February meeting that any major reorganization of the pesticide machinery "would demand significant financial resources".¹² An inextricable wedding of the structural aspects of the locus problem with the resources necessary for the regulatory system had taken place.

Structure was put temporarily on hold. In April 1990, the Review Team started to concentrate on the resource dimension of choosing a mode for regulation. This change of course highlighted the Review Team's insistence on presenting the Minister of Agriculture with a mode arrangement that passed the test of fiscal viability.

The Review Team requested a series of cost studies from the core departments. The Pesticides Directorate compiled figures on the status quo and reported that the registration review process operated with 118-171 person-years and over \$9-million in salary and operational spending (see Table 3). The Review Team also sought estimates of the costs of reform: for reducing the backlog of applications for registration within a year and maintaining a turnaround time for new submissions of 0-3 months, and for setting up and operating the Team's proposed regulatory system. Pesticide officials were specifically asked to examine the revised mode arrangement in

¹² As recorded in the official minutes of the Review Team meeting, February 25-26, 1990.

TABLE 3

**Estimated Resource Requirements for the Existing Federal
Pesticide Registration Review Process**

The Core Department Perspective

The estimates below were derived from a series of documents submitted to the Review Team by the core departments in February 1990 and notes taken by Review Team members during oral presentations by the federal advisors. The figures submitted for Agriculture, Health and Welfare and Fisheries and Oceans represented resources committed to registration at headquarters and excluded other functions, such as research and compliance, and regional office activities.

Department	Person-Years	Salary (in millions)	Operational
Agriculture	75	\$ 3.5	\$ 556,000
Health & Welfare	35	1.6	750,000
Environment	37-55	2.1-2.5	NA
Fisheries & Oceans	4	0.3	30,000
Forestry	2	0.1	30,000
Total:	118-171	\$ 7.6-8.0	\$ 1,400,000+

the third draft of the preliminary report. The significance of the core departments' cost studies is examined in Section 2.1.1 and Section 2.1.3.

The Review Team's thinking on the mode for regulation had actually not progressed very far beyond the general idea of functional differentiation. The first few outlines of a decision-making system were based on either a single agency with one branch for policy and another for registration¹³, or two separate agencies¹⁴. In both instances, the registration body would "report to Parliament via [an unnamed] minister or ministers." The reference to an agency/agencies accurately reflected the direction the Review Team's mode choice was evolving in the early stages, but was otherwise misleading. As of the February 1990 meeting, the structure part of the Team's mode recommendation was in a holding pattern. Subsequent descriptions of the proposed regulatory system appropriately switched to the relatively neutral language of "entities."¹⁵

¹³ See Draft 1 of the Review Team's preliminary report, titled "Proposed Federal Pest Management Regulatory System". This version was put together by the Review Team Secretariat for discussion at the Review Team session on February 25-27, 1990.

¹⁴ See Draft 2 of the preliminary report, which was reviewed at the March 25-27 and April 11-12 Review Team meetings.

¹⁵ See Draft 3 of the "Proposed Federal Pest Management Regulatory System" which was prepared for the Review Team meeting on April 23-25, 1990. As discussed elsewhere in the chapter, the regulatory system outlined in Draft 3 was supposed to be the basis for the core departments' cost study.

While the Review Team awaited the departments' cost estimates, Price Waterhouse submitted a report on the decision-making process for pesticide registration.¹⁶ This study had been commissioned by the Review Team in the hopes of diagnosing "the extent and cause of backlogs in registering new products". Using a Taylor-like approach, Price Waterhouse staff had dissected the work processes in the registration system based on interviews with regulatory officials, manufacturers and users, as well as independent analysis of data in the core departments' internal tracking systems. Several crucial bottlenecks had been discovered. These were reported to the Review Team, along with preliminary suggestions for remedial action. Price Waterhouse's study had unexpected, important implications for the choice of mode for regulation. Section 2.0 explains that, as happened with costs/resources, the process for regulatory decision-making became deeply embedded in the Review Team's mode choice.

The core departments delivered their cost projections in May 1990. The Review Team's instruction had been to base the calculations on Model 3 of the draft federal pest management regulatory system. This included a Pest Management Promotion Entity and a Pest Control Product Management Entity that "report[ed] to Parliament through Minister(s)". Model 3 hinged on a new Pest Management Act

¹⁶ Price Waterhouse, "Review of Work Processes Associated with the Registration of Pest Control Products: Summary of Interviews, Case Studies and Focus Groups: Final Report," April 1990.

and, conceptually, a four-stage registration process. The Review Team used the occasion to float a number of trial balloons related to each stage, such as policies on data protection, formulants, minor use pesticides and reevaluation; administrative procedures for the screening process; critical need registration; and appeals.

The cost aspect of the Review Team's mode choice came to a head at memorable sessions with federal officials. At the first, Review Team members were shocked to be advised that setting up and operating the proposed regulatory system would require more than 170 new person-years.¹⁷ This amounted to over a doubling of the staff resources currently deployed for pesticide registration. The implications of the departments' cost projections are addressed in Section 2.1.3.

The Review Team inevitably demanded that the figures be rightsized. Federal officials were also pressed to come up with separate estimates for two alternative department-based modes: a single decision-maker and multiple decision-makers with one having primacy. These options had gained support amongst some Review Team members on the strength of their alleged efficiency. In light of the core department's alarming cost estimates, it was more than coincidental that the Review Team started to toy with using cost recovery for pesticide registration.

¹⁷ Even more shocking were the departments' estimates of over 240 new person-years for the full job, that is to eliminate the backlog of registration submissions, maintain a 0-3 month turnaround time for new submissions and implement the Review Team's proposed pest management regulatory system. See Table 5 later in the chapter.

Another important development took place in the choice of mode for regulation as the Review Team still reeled over the cost studies. A revised version of the Team's interim recommendations, circulated in June 1990, included the first detailed description of an administrative arrangement for the regulatory system.¹⁸ An "independent administrative agency" was proposed. It would have an office for policy and another for registration, and would report to Parliament through the Minister of Agriculture. This mode concept seemed in some senses to come out of thin air given the overall trend of discussions with federal and provincial pesticide officials.

It was generally accepted by June 1990 that the mode problem could not be resolved in time for the Review Team's preliminary report. With cost now firmly entrenched as a priority factor, the Review Team considered hiring an outside consultant to compare the efficiency and cost effectiveness of an independent regulatory agency (staffed by pesticide officials currently working out of the core departments) and a departmental mode with regulatory responsibility shared amongst three ministers. There was special interest in distinguishing the start-up costs for an agency from the on-going operating costs. This showed that Review Team members appreciated the limits of the core departments' estimates (see Section 2.1.3). Despite the Review Team's good intentions, the planned consultant's study never got off the ground.

¹⁸ See Proposal B dated June 3, 1990. This was the sixth draft of the Review Team's "Proposed Federal Pest Management Regulatory System".

A strategic choice had to be made at the end of June. Realistically, the preliminary report could not be released without some kind of administrative structure. The Review Team recognized this and consequently agreed on a "placeholder": an unusual CEPA-inspired multi-ministerial arrangement.¹⁹ The interim mode proposal, one of the backbones of the prospective Pest Management Act, meshed structure, administrative processes and resources.

The central idea was to have three ministers - the Ministers of Environment, Health and Welfare and Agriculture - assume joint responsibility for regulatory decision-making under the Act. The PMA would be administered by the Minister of Agriculture alone, however, through a new Pest Management Bureau. The Bureau would carry out both policy and registration functions. The Review Team's preliminary mode outline also included a complicated set of inter-departmental relations to support regulatory decision-making by the ministerial triad. The centrepiece was a committee comprised of directors-general from the newly-designated core departments, with a rotating chair, which would review advice from pesticide

¹⁹ See Pesticide Registration Review Team, A Proposal for a Revised Federal Pest Management Regulatory System, pp. 9-11, especially pp. 9-10. There were two good reasons for using CEPA as a model in the preliminary report. First, the Act's concept of shared decision-making authority was novel and therefore might provoke creative thinking about the mode for pesticide registration. It also helped that the Executive Secretary and several others involved in the pesticide review had been instrumental in drafting CEPA. A number of review participants suggested in confidential interviews that the CEPA-inspired mode also played a critical function with the policy community, in that, by avoiding hard choices, the triad concept prevented damaging backlashes from Review Team members' constituencies who thought their representatives had caved in to pressures from other interests.

officials and submit "consensus recommendations" on registration to the ministers. Other departments, such as Fisheries and Oceans, Forestry and Labour, would be consulted when appropriate. A notation added to the interim report confirmed how fluid the Review Team's mode preference remained: "The key operational and design features of this administrative structure are under development and related resource implications are being determined."²⁰

The Review Team formally released the preliminary report in July 1990. As described in Chapter 5, public hearings were planned for September and October and, in the meantime, the policy community was invited to send reactions directly to the Review Team in Ottawa. Through these consultations the Review Team learned that the proposed move to a multi-minister-based mode for regulation was unacceptable to many members of the policy community. The degree of dissatisfaction - and some of the reasons for it - are revealed in Section 2.1.1.

The Review Team regrouped at the end of October after criss-crossing the country. The policy community's emphatic negative verdict on the proposed mode for regulation was taken to heart. Team members reconfirmed that cost had to be a prime factor in the mode recommended to the Minister. This time, however, cost referred not only to the resources required to set up and operate the registration system, but

²⁰ Pesticide Registration Review Team, A Proposal for a Revised Federal Pest Management Regulatory System, p. 10.

also the size of the regulatory burden imposed by the decision-making process. The latter perspective on cost had been a major theme in the policy community's almost universal attack on the proposed inter-departmental committee.

The structural options considered for the mode for regulation quite naturally opened out once again. The Review Team prepared to (re)visit three arrangements: an independent agency, a single department and joint responsibility between the Minister of Health and Welfare and the Minister of the Environment. To assist this process, Leblond and Versteeg headed up a tour of several European pesticide regulatory systems.²¹

The pace of the mode choice accelerated as the Review Team neared its December 1990 deadline. There was another critical turning point in late November, when Team members finally gave approval in principle to the concept of an independent regulatory agency dedicated exclusively to pesticides:

The [Pest Management Regulatory] Agency will be responsible for all regulatory functions in the legislation and for developing and implementing policies related to the regulation of pest control products.²²

²¹ The tour covered Britain, the Netherlands, Sweden and the European Community.

²² See the November 22, 1990 version of the Review Team's "Proposed Federal Pest Management Regulatory System".

Even more remarkable, the PMRA would have a reporting relationship through the Minister of Health and Welfare. The term "self-contained" was later inserted to emphasize the agency's separation from the Minister.

The Review Team's final mode choice came down to the wire. After last-minute bargaining, agreement was reached on three important additions regarding the decision-making process and resource elements of the mode for regulation.²³ Review Team members decided, on the one hand, to develop the skeleton of an organization chart for the Pest Management Regulatory Agency (e.g. a product management section) and to specify some of the duties they considered suitable for the various units. The mode recommendation delivered to Mazankowski on December 22nd also provided for the Pest Management Regulatory Agency entering administrative accords with appropriate federal departments "on matters of mutual interest" (e.g. the criteria and evaluation procedures to be used in registration decisions). The finishing touch concerned the perennial problem of resources. A strongly worded caution to the Minister that the PMRA must be allocated "[s]ufficient funding...to ensure it can effectively and efficiently carry out its mandate" was inserted into the text.

²³ See Pesticide Registration Review Team, Final Report: Recommendations for a Revised Federal Pest Management Regulatory System, pp. 5-8, especially pp. 5-7.

2.0 ANALYSIS OF THE MODE CHOICE

The second half of the chapter uses the interest politics-mode paradigms-decision style framework to explain the 1989-90 Pest Management Regulatory Agency recommendation. Section 2.1 analyzes the impact of interest politics. The roles played by mode paradigms and the decision style in the Review Team's choice of a mode for pesticide registration are examined in Section 2.2. and Section 2.3. respectively.

2.1 Interest Politics

Interest politics is the first independent variable in the explanatory framework developed in Chapter 3 and comes under scrutiny here. Section 2.1.1 assesses the effects of several key information sources on the Review Team's choice of a mode for regulation. The structure of mode-related coalitions in the policy community and their part in the PRR's 1989-90 mode choice are investigated in Section 2.1.2. Finally, Section 2.1.3 explains how the knowledge base and blocs of interests converged in a pivotal conflict between the Review Team and the core departments over the projected resource requirements for a reformed pesticide registration system. Throughout the analysis both planes of interest politics in the pesticide review - on the Review Team and within the sub-sectors of the policy community - are selectively examined.

2.1.1 Resources: The Knowledge Base for a Mode Choice

The critical resource in the 1989-90 political struggle over the mode for pesticide registration was information about the machinery of government. The rational model of decision-making "impl[ies] choices and alternatives."²⁴ In the context of the Review Team choosing a mode for regulation, rationality demanded basic information about the current registration system, for instance how resources were deployed, and also about the features of alternative organizational arrangements for delivering the federal government's pesticide registration function. There were thus two dimensions to the knowledge base.

No one on the Review Team had special expertise in designing government machinery. Nor did the Review Team have a mandate to collect raw data first-hand. Extremely heavy reliance therefore had to be put on the core departments for guidance. In fact, as Sections 2.1.2 and 2.1.3 later explain, the core departments had a virtual monopoly on both dimensions of the knowledge base. Non-governmental interests, on the other hand, encountered almost insurmountable difficulties attempting to make a rational choice about the mode for regulation. Their access to the knowledge base was seriously constrained, regardless of whether they went through the federal bureaucracy or other channels.

²⁴ Leslie A. Pal, Public Policy Analysis: An Introduction (Toronto: Methuen, 1987), p. 44.

The Review Team and other members of the policy community were generally hard pressed in the early months to present refined mode proposals. There seemed to be a preference for an agency-based mode for regulation. When push came to shove, however, cracks appeared. The ambivalence and confusion which permeated discussions with provincial and territorial regulatory authorities in February 1990, for example, could be explained by the fact that the term "agency" was often actually code for "ABMA", or anywhere but the Minister of Agriculture. ABMA was itself rhetoric designed to send a strong political message to the Minister of Agriculture and the regulatory officials in his department. So despite the illusion of a strong pro-agency constituency, the Review Team in fact devoted considerable effort to smoking out viable mode options.

If the vital mode-related resource in the 1989-90 phase of the PRR was information that filled in the knowledge base, several sources proved instrumental in the Review Team's mode choice. One was Kansky and Vigod's study for the environmental sector. This study, as described earlier in the chapter, entrenched the principle of functional differentiation and a corresponding division of labour between regulatory organizations. The discussion here examines the powerful moulding capacity of three other information resources: the locus report authored by the Regulatory Affairs Branch of the federal Office of Privatization and Regulatory Affairs, the Price Waterhouse backlog study, and public comments on possible modes

for the registration system. The special role of the core advisory departments is investigated in Section 2.1.2, and again in Section 2.1.3.

The preceding chronology observed that the Review Team arranged with the Office of Privatization and Regulatory Affairs' Regulatory Affairs Branch for a background study on locus. RAB's report - intended to be an assessment of the strengths and pitfalls of the current Agriculture-centered system and possible alternatives, by a disinterested party - was the main agenda item at the Review Team meeting in late February 1990. To better understand the impact the report had, it is useful to consider RAB's history.

The Regulatory Affairs Branch had been born with the Conservative government's 1986 federal regulatory reform strategy. A small central agency, RAB managed a new regulatory review process. The mandate was two-sided: to perform a catalyst and challenge function with respect to departments' regulatory programmes, and to coordinate, research and review federal regulatory policies. The latter function was consistently less developed than the former throughout RAB's five year existence.²⁵

²⁵ The Mulroney government announced OPRA's disbanding in the February 1991 budget speech. Many of the regulatory review functions performed by the Regulatory Affairs Branch were subsequently taken over by the Regulatory Affairs Division, Treasury Board Secretariat. A first history of RAB and the federal regulatory review process has recently been published by the House of Commons Standing Committee on Finance as part of its study on regulations and competitiveness. See W.T. Stanbury, Reforming the Federal Regulatory Process in Canada, 1971-1992 (December 1992),

The pesticide review was one of the noteworthy occasions when RAB aspired to play a relatively activist role in the regulatory policy arena. The Branch's underlying mission was to inject the principles of "smarter regulation" into the debate about the proper mode for regulation. This meant in effect reframing the Review Team's existing perspective. Rather than trying to enumerate the strengths and limitations of possible locations for regulatory responsibility, RAB officials consequently developed the notion of a spectrum of organizational forms for regulation. The idea was to facilitate a more systematic choice about the mode for pesticide registration, by offering the Review Team a simple conceptual tool.

Many of the early conclusions drawn by the Review Team were not quite so automatic for RAB. For one thing, members of the Review Team tended to assume that the locus of responsibility for pesticide registration had to change and that the real issue, then, was deciding where responsibility ought to go. RAB also sensed - correctly, in hindsight - that an agency had become a cure-all for some Team members and many of their constituencies in the policy community.

which is included as a very lengthy appendix in the Committee's Minutes of Proceedings and Evidence, Issue. No. 23, November 17-December 10, 1992. An alternative perspective, which locates RAB in the broader context of Canadian regulatory reform, is found in Chapter 3 of Margaret M. Hill, "Freedom to Move: Explaining the Decision to Deregulate Canadian Air and Rail Transportation," master's research paper, School of Public Administration, Carleton University, Ottawa, August 1988.

The discussion paper submitted to the Review Team applied RAB's challenge function to choosing a mode for regulation. It was argued that the problems policy community members attributed to the existing organizational arrangement, such as bias, did not necessarily discriminate between types of regulatory bodies. RAB's study also recommended distinguishing actual problems from perceived ones. The appropriate solutions, the argument went, might differ. On the flipside, RAB stressed that the characteristics agencies and departmental modes in fact shared could have more salience for choosing a mode than the admittedly important structural differences.

RAB's study maintained, in short, that the Review Team was asking the wrong question. Rather than assuming that the locus must change and then considering whether another departmental arrangement or an agency was best, to RAB's mind the Review Team's chief concern had to be designing efficient and effective machinery for government regulation. RAB accordingly worked up several potential department- and agency-based arrangements and examined the administrative and political considerations they raised, the latter with less success.

The February 1990 Review Team meeting showed that, from the Review Team's standpoint, the RAB report was not nearly as helpful as intended. There was general frustration with the report's lack of attention to so-called practical matters; correspondingly, Review Team members showed little tolerance for the guiding

principles introduced by RAB. At the end of the day, RAB was lumped in with the core advisory departments, as just another barrier to change hiding behind the tomes of parliamentary government.

Nonetheless, it is probably fair to say that in the longer-term - and as RAB hoped - the report had a trickle down effect. It assisted the Review Team in reconceptualizing the mode question. After the February meeting there was a detectable shift in the Review Team's approach to the mode for regulation. Reducing conflict between the lead regulatory departments became the main problem to be addressed through a redesigned registration system. The Review Team also started to think in more creative terms about solutions, such as co-location and inter-departmental mechanisms for consolidating advice on pesticide risks. Both these developments could reasonably be attributed to the implicit, indirect influence of themes and suggestions in RAB's study.

Unlike RAB's study, the Price Waterhouse report was not specifically commissioned by the Review Team to help in the 1989-90 mode choice. Nevertheless, as indicated in Section 1.2, this analysis of work processes in the registration system had unexpected but important ramifications. "[F]undamental changes," the Review Team was advised, "are going to have to be made in the regulatory process for pest control products and the organizational relationship

between the federal government stakeholders."²⁶ In fact, a number of policy and service delivery problems which fed the backlog were blamed on the extremely fragmented state of decision-making responsibility in the registration system. Interestingly, Price Waterhouse considered fragmented authority/responsibility a major policy issue, not a problem of administration or process.

The salient message was that administrative processes and locus, or structure, were related. Price Waterhouse's answer to the backlog problem was "a central authority" to coordinate the registration process and "to ensure consistency of expectations and to set priorities."²⁷ Various formats were proposed:

- . improved MOUs between Agriculture and the advisory groups;
- . a central agency independent of any department but staffed by all the groups currently involved in registering pesticides; and
- . an inter-departmental coordinating mechanism modelled on the Panel on Energy Research and Development.

Price Waterhouse had found that support was strongest in its focus groups for the second option, an independent regulatory agency.²⁸ As would happen later with costs/resources, the Price Waterhouse study put outward pressure on the scope of the

²⁶ Price Waterhouse, "Review of Work Processes," p. 35.

²⁷ Ibid., p. 38.

²⁸ Ibid.

Review Team's mode choice. Initially the choice had covered only structure; now, it also included the process for regulatory decision-making.

The third major source of intelligence affecting the Review Team's mode choice was the response from the policy community on the July interim report. In contrast to the circumstances of the RAB and Price Waterhouse reports, the policy community reacted to a partially-defined option. Recall that this was the unconventional triad arrangement, where decision-making responsibilities would be shared amongst the Ministers of Health and Welfare, Environment and Agriculture. This proposal provoked almost universal condemnation from across the policy community even though it was only a placeholder.

Analysis of the submissions received by the Review Team gives a feel for the degree of dissatisfaction. Approximately 180 of the policy community's 475 responses to the preliminary report referred to the mode/locus issue in some way. A mere 10% of these registered support for the Review Team's triad. Not only were members of the policy community critical, they put forward concrete - although often murky and/or politically naive - alternatives. A third of the mode-related responses, mostly from the farm sector, favoured keeping the existing Minister of Agriculture-headed arrangement intact. Slightly less than a fifth recommended transferring regulatory responsibility to an independent agency. Several interesting options surfaced within the departmental framework: 85 submissions advised moving

responsibility to another minister, either the Minister of Environment or, in one case, the Minister of Health and Welfare; and a third supported various combinations of joint ministerial responsibility (i.e. the Ministers of Environment and Health and Welfare, the Ministers of Environment, Health and Welfare and Agriculture, or the last three with another minister, such as the Minister of Consumer and Corporate Affairs, Labour or Forestry). A number of the policy community's submissions stressed the importance of bringing responsibility for registration under a single roof. Either a minister or another type of organization tended to be acceptable. The vast majority of briefs received by the Review Team admittedly did not express a clear preference on the mode. But even amongst these, 75 were at least highly skeptical about the workability of the triumvirate concept.

The policy community's discontent confirmed that the proposed ministerial triad supported by an inter-departmental committee could only be temporary. The Review Team would have to return to the drawing board if it wanted to present the Minister of Agriculture with a mode recommendation that had strong backing from stakeholders. The consultations were also important because they told members of the Review Team what criteria the policy community considered reasonable for deciding on a mode for pesticide registration. The number one objective appeared to be a registration system that worked, and produced decisions in a timely, efficient fashion.

The most significant consequence of the Review Team's direct consultations, however, concerned the coalition structure of the policy community. The Review Team learned through the written briefs and the public hearings that there was no greater consensus in the policy community about the fine details of a mode for regulation than there was amongst members of the Review Team. The absence of a prevailing wisdom was a double-edged sword. There was frustration on the one hand, because a factor that might normally bound or limit the Review Team's options did not exist. Equally, though, there was a liberating effect. Without deeply rooted commitments to specific mixes of structure, resources and processes the Review Team was relatively free to win over the policy community's support for a reasonable mode proposal, one that promised immediate benefits or could be demonstrated to be an essential part of an attractive set of reforms.

Through the RAB and Price Waterhouse studies and consultations with the policy community the Review Team came closer to reaching a conclusion about the mode for regulation. Yet, it also became clear that sincere, well-intentioned efforts by non-governmental interests to fill in the knowledge base for a rational mode choice could be derailed. The search for "creative solutions to the locus problem", as several Review Team members put it, came up against major roadblocks.

The first related to mandate. Under the multi-stakeholder format selected by Mazankowski, the Review Team simply did not have the authority to collect data

directly from the registration system. The Team was therefore dependent upon the goodwill of federal officials, in particular the core departments. This intermediary relationship proved uneasy.

The stumbling block from one perspective was the departments' proprietary attitude toward the administrative machinery for government regulation. The federal advisory officials (even when they dropped down to the middle management level) vigorously and repeatedly asserted their claim on the area of government organization at Review Team meetings. Combined with the Review Team's restricted mandate, this led the Review Team and other members of the policy community to be suspicious about the information that was selectively disclosed. The conclusion that the Team was being denied access to crucial information or that data essential for rational decision-making were being concealed by the departments was probably unavoidable in the circumstances.

At least one actor in the policy community tried to penetrate the bureaucracy. The Crop Protection Institute of Canada, working with a government relation firms, approached officials at several of the core departments and central agencies for suggestions about improving efficiency and modifying program evaluation principles to the mode choice, and also to get a realistic sense of resource availability for a reformed pesticide registration system.²⁹ CPIC met with "a brick wall".³⁰ The

²⁹ Various confidential interviews.

rebuff could have been expected simply because CPIC bypassed the agreed on channels for the pesticide review and the departments were inherently suspicious about industry's motives. Nevertheless, another important factor was the tension between private sector stakeholders and government regulators when it came to the mode for regulation. This theme is explored more fully below in the context of the structure of the policy community, and again in Section 2.1.3.

Even when the Review Team did succeed in gaining insight into the mode issue, it was often unable to interpret the data received. There were no machinery experts on the Team. More crucial, the data bore the imprint of bureaucratic politics. This came to light in compelling fashion in the Review Team-core department battle over resource projections, which is pursued below in Section 2.1.3.

Contrary to what might be predicted, specialists in administrative theory played a marginal role in the Review Team's mode choice. Recall that the Team planned in the spring of 1990 to commission a special consultant's study on costs. Budget considerations were one reason the study never got off the ground. The determining factor, however, was the failure to find anyone qualified and willing to undertake the necessary comparative analysis, either in academia or in the private sector. The Review Team's inability to access these kinds of alternative sources of expertise in government machinery and reform reinforced its dependence on the core departments.

³⁰ Confidential interview.

2.1.2 The Coalitional Structure of the Policy Community: Insiders and Outsiders

As argued in Chapter 3, the concept of insiders and outsiders sheds light on the interest basis of the mode choice. This section examines the structure of the pesticide policy community and critical developments affecting the predominant coalition of interests as the debate about the mode for regulation proceeded in 1989-90.

The first point is that the PRR's multi-stakeholder format, combined with the mandate given to the Review Team, imposed an artificial, unique structure on the policy community's 1989-90 mode choice. Private sector interests were by definition insiders in the mode choice. That they had such a role in designing the administrative machinery for regulation broke with Canadian tradition.

Private sector interests - the Canadian Manufacturers of Chemical Specialties, the Canadian Federation of Agriculture, the Canadian Horticultural Council, the Canadian Environmental Network, the Canadian Medical Association and others - were at the outset on equal footing with the bureaucratic delegates on the Review Team. Moreover, as time passed, the core advisory departments were marginalized from the first mode choice in the PRR. In normal circumstances (see Chapter 3), these bureaucratic interests would have dominated the mode choice. Here, they

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shifted from insiders with status equivalent to private sector members of the Review Team, to outside advisors who were viewed by the Team as major obstacles to reform who had to be circumvented.

The middle phase of the pesticide review featured on-going conflict between two coalitions of interests. On one side was a group strongly opposed to an agency-based mode for regulation. On the other, a very loosely tied pro-agency coalition. The mode-based fracture in the policy community has particular salience for understanding the Review Team's Pest Management Regulatory Agency recommendation because it coincided with a split between bureaucratic and non-governmental interests. The core departments, supported by other departments and agencies in the federal working group, led the anti-agency forces. The pro-agency coalition was dominated by Review Team members and their constituencies in the policy community.

Consider the anti-agency bloc. Environment and Health and Welfare were at the helm, supported more or less by the other departments and agencies in the federal working group. This contingent officially objected to any kind of agency-based arrangement for pesticide registration. The departments' common front was based on a simple contention: that an agency was not only unnecessary and expensive, but would waste scarce government resources through duplication. A few of the departments had other special concerns. For instance, Health and Welfare claimed an

agency mode threatened the quality of pesticide risk assessment because, isolated in an agency, it would no longer be able to free-ride on similar regulatory functions (e.g. radiation) elsewhere in the bureaucracy. The shared perspective did not prevent fine distinctions sometimes being made, nor the departments presenting their views to the Review Team independently.

The anti-agency coalition also had a foothold in principle. In particular, the departments took issue with the division of labour between the Review Team and its advisors. The departments maintained that it was completely unacceptable for the Review Team to detail the registration system's organizational structure. As Health and Welfare argued, administrative arrangements were normally considered the discretion of deputy heads in parliamentary regimes. The fact that the Review Team had successfully eked out a mandate covering pest management policy in general made the Team's stepping into the administrative domain even more controversial for Pesticides Directorate officials. From one standpoint the departments' position was self-serving. However, it also simply manifested the tradition of executive preeminence discussed at length in Chapter 3.

Take now the structure of the pro-agency coalition. At a quick glance, the Review Team and much of the non-governmental component of the pesticide policy community presented an impressive force in favour of a mode for regulation based on

an independent agency. This was partly an illusion. A closer look showed the existence of what amounted to an Anywhere but the Minister of Agriculture faction.

The ABMA umbrella covered a wide range of interests and positions. The only visible, deeply committed advocate of moving to an independent regulatory agency mode was the Consumers' Association of Canada which for a number of years had endorsed the idea of a CRTC-like mode. Other sectors in the policy community conformed more closely to the true spirit of ABMA. The environmental sector delegates on the Review Team, for example, considered that wresting regulatory responsibility from the Department of Agriculture was the bottom line. Virtually any other mode would be acceptable; they preferred a departmental arrangement based in either Health and Welfare or Environment. The ABMA coalition also included stakeholders for whom the central issue was not so much pushing forward with an agency as resolving specific concerns related to the existing mode arrangement, quite possibly by excluding the Minister of Agriculture. The forestry sector, for one, advocated a single decision-maker. Farmers simply wanted to eliminate opportunities for political interference in day-to-day registration matters. The quasi-industry delegates stressed the importance of what they called "focussed authority and management". Out of the public eye they acknowledged that this probably implied an agency-based mode for registration.

The facade started to crumble when the Review Team's mode choice accelerated in early 1990. Section 1.2 described the general dimming effect of meetings with the federal advisors and the RAB locus report. Reservations about an agency came from other quarters as well. The medical/public health sector, for instance, raised concerns on the Review Team about the effectiveness of a pesticide-dedicated agency regulating in isolation from other government risk assessment activities.

In addition, the agency concept was prone to abuse. The labour sector's proposal for a multi-stakeholder agency for pesticide registration modelled on provincial workers' compensation boards showed just how elastic the notion of an agency mode could be. When negotiating positions were prodded, it also became apparent that stakeholders were prepared to cast their ballot for an agency for divergent, frequently self-interested reasons. For example, the presumed political expediency of an agency-type arrangement - because it promised a single organizational target for lobbying - was sometimes disguised in the less offensive language of management and administrative theory. These themes are pursued below in Section 2.2's analysis of stakeholders' mode paradigms.

The central issue in the interest politics of the pesticide review is why this second coalition was unable to immediately translate its agency preference into the mode choice. The Review Team possessed formal authority to propose a mode for

regulation. Yet, significant difficulties were encountered embodying the agency preference in a recommendation to the Minister. There were several factors at work.

One was that the Review Team lacked full access to the knowledge base. This put limits on the information available to justify ex poste facto regulation by agency. The case for choosing an agency-based mode had important holes in it, as the Review Team came to appreciate. Moreover, left unaddressed, these holes might come back to haunt the Team when the government considered implementation.

Another factor was the Review Team's own wavering about the wisdom of an agency. This resulted from the weak foundation upon which the pro-agency coalition had been built. It was also a natural consequence of the Review Team's learning curve. The information collection process analyzed in Section 2.1.1 exposed members of the Review Team to previously unknown dimensions of the mode choice, including the significance of bureaucratic norms. From a strategic perspective too, it was merely reasonable for Review Team members to re-evaluate the agency mode given the positions tabled by the core departments.

The Review Team's capacity to shape the mode choice was also affected by the scope of the PRR. The Review Team was responsible for deciding on a comprehensive package of reforms, not only a mix of structure, resources and administrative processes for the pesticide registration system. Therefore, the mode

choice was part of a much larger reform exercise in which there were major fractures amongst Review Team members and other stakeholders over other, often fundamental issues. As the analysis in Section 2.3 shows, the Pest Management Regulatory Agency recommendation was a negotiated outcome which required several interests compromising on other issues.

Finally, the Review Team's leverage over the mode for regulation was constrained by the anti-agency coalition of core departments. The departments skilfully deployed the resources at their disposal to shape the mode's reform. This was demonstrated by the major conflict that erupted over projected costs, analyzed in the next section. The Review Team realized early on that it was extremely unlikely that the core departments would ever be persuaded of the benefits of an agency. In the end, then, the issue was devising a plan to effectively counter their opposition. A plan was necessary if an agency recommendation was to have any chance of being implemented by the government.

2.1.3 Interest Politics in Action

The interest politics of the 1989-90 phase of the pesticide review was encapsulated in the Review Team's frustrating attempts to get timely resource information from the core advisors. When the knowledge base and two blocs of

interests collided, an intriguing struggle erupted. This section uses that small but pivotal slice of the pesticide review to draw out a number of themes discussed above. As Chapman and Greenaway observe: "the interaction of pressures from outside with the concerns of those responsible for manning the administrative machine is an area of special interest for students of administrative reform."³¹

Section 2.1.1 described the Review Team's strategy for filling in the knowledge base for a rational decision about the mode for regulation. Despite roadblocks, the Review Team persisted in devising a viable mode for regulation. The Review Team's relationship with the core advisory departments in this regard is revisited here. The crux of the relationship was a fundamentally political struggle that exploded over the issue of resource requirements.

As noted in preceding sections of the chapter, the Review Team depended on officials from the core departments for cost information regarding the mode for regulation.³² Events suggested that getting to the bottom of this issue was no easy matter, even when the questions were about the current registration system. Access to the knowledge base was curtailed by the normal traditions of secrecy and confidentiality. Compounding the situation were genuine data problems related to

³¹ Chapman and Greenaway, The Dynamics of Administrative Reform, p. 188.

³² That is, on current resource use; and on setting up and operating Model 3 and reducing the backlog.

Hodgett's bleeding factor. The Review Team learned that staff resources were often not dedicated exclusively to pesticide registration. This was especially true in the advisory departments where experts in scientific risk assessment, given their scarcity, worked on other regulatory programmes as well. Using pesticide experts horizontally was also a human resource management tool for keeping staff motivated.

The more serious problem for the Review Team, however, was the highly political nature of an exercise that involved explicitly identifying how resources were distributed across departments, and even within them. The core departments (and their internal directorates) feared losing resources judged by outsiders (whether inside or outside government) to be excessive or redundant. Several also saw the cost exercise as potentially valuable ammunition in the perpetual fight over resources for pesticide registration and closely related regulatory programmes.

The inter-departmental politics of choosing a mode for regulation took centre stage when the Review Team requested an assessment of the cost implications of Model 3. The departments themselves could not cooperate to produce a single report. Two were instead delivered, after several months of wrangling (see Table 4). Agriculture, Environment, Fisheries and Oceans and Forestry submitted a joint report. Health and Welfare, consistent with its generally isolationist attitude toward the pesticide review, prepared its own figures. The two reports were based on such

TABLE 4

Core Department Projections of the Resources
Required for the Review Team's Proposed
Federal Pesticide Regulatory System

(in person-years)

1) The Joint Report

Department	To Eliminate Backlog	To Maintain Turnaround	For RT Model 3	Total*
Agriculture	33	38	65	136
Environment	18		51	69
Fisheries & Oceans	10.5	7	4	21.5
Forestry	1	0	11	12
Total:	107.5		131+	238.5+

* i.e. to implement the proposed new regulatory system and reduce the backlog.

2) The Health and Welfare Report

Department	For RT Model 3
Health & Welfare	17**

** "if existing turnaround times are maintained and the backlog eliminated".

different assumptions that comparison - let alone a tallying up - was next to impossible.

Politics also mired the core departments' relationship with the Review Team. Section 2.1.1 dealt with the issue of contending claims on the area of government (re)organization. Other aspects of the politics of choosing a mode for regulation came to light when the Review Team received the departments' cost studies.

Table 3 summarizes the departmental perspective on the estimated resource requirements for the status quo. The figures were derived for the case study from a series of documents given to the Review Team by the core departments in February 1990, and notes taken by Review Team members during oral presentations by the federal advisors. In the departments' scenario, the registration system operated with 118-171 Pys and at least \$9-million in salary and operational costs.

Price Waterhouse's backlog study painted another picture. Table 5 shows person-years estimates derived from that report. The total: 130 Pys.

The substantial discrepancies in the two perspectives could only be attributed to bureaucratic politics. The ultimate source of data was the same in each instance (i.e. the core departments). Price Waterhouse's findings suggested that the figures in the core departments' studies were artificially inflated, especially for Environment and

TABLE 5
Estimated Resource Requirements for the Existing Federal
Pesticide Registration Review Process

The Price Waterhouse Perspective

Figures roughly comparable to the core departments' estimates (see Table 3) were compiled, again for this case study, based on Price Waterhouse's study for the Review Team on the backlog problem. The Price Waterhouse study is discussed elsewhere in the chapter. The relevant findings for the present purposes:

Department	Person-Years
Agriculture	61.5
Health & Welfare	36
Environment	27
Fisheries & Oceans	2
Forestry	3

Agriculture. The Review Team and others in the policy community had reasonable grounds, it seemed, for being cautious about the advice they were getting from departments. While perhaps a crude indicator, contradictions between the advisors' reports and the one from Price Waterhouse suggested that factors besides rational decision-making played out in choosing a mode for regulation.

Table 6 summarizes the core departments' projections of the person-year requirements for Model 3. The bottom-line again caught the Review Team by surprise: 170 new person-years to set up and operate the reformed system. On a closer look, the estimates were highly problematic since the mode issue was essentially sidestepped. Contrary to the Review Team's directions, the report from Agriculture et al. assumed "an improved status quo". Health and Welfare did not even indicate what mode was assumed.

Furthermore, the departments found ingenious ways to come in with deceptively high estimates. They assumed that resources were single-purpose, that the new resources necessary to reduce the backlog could not later be converted to operating the regulatory system. The departments also failed to distinguish the person-years required to set up the new system from those subsequently necessary to man it; some were presumably one-shot deals (e.g. drafting new legislation) that could afterwards serve another purpose. Health and Welfare also made a point of stressing that the resource demands of the new regulatory system would impact negatively on

TABLE 6

Summary of Core Department Projections of the Resources
Required for the Review Team's Proposed Federal Pest
Management Regulatory System

(in person-years)

Department	Current	New	Total
Agriculture	74.5	65	139.5
Health & Welfare	40	42	82
Environment	14	49	63
Fisheries & Oceans	3	4	7
Forestry	3	11	14
Total:	134.5	171	305.5

other departmental programmes under the FDA, which were outside the purview of the pesticide review.

2.2 Mode Paradigms

Recall the proposition in Chapter 3 that policy actors participate in the mode choice armed with distinctive sets of ideas and beliefs regarding the mode for regulation. The concept of mode paradigms was introduced to assess the impact these ideas and beliefs have on the policy community's choice of mode for regulation. The purpose here is to examine the Review Team's Pest Management Regulatory Agency in terms of the underlying mode paradigms, and their capacity to shape the choice of mode for regulation because they filter options and inform interest politics.

As before, analysis proceeds on two levels. Section 2.2.1 considers mode-related ideas and beliefs on the macro plane, on the Review Team. Section 2.2.2 investigates selected perspectives on the mode for regulation within the pesticide policy community. The approach in the latter section is to compare and contrast the mode paradigms of the Canadian Labour Congress, the Consumers' Association of Canada, the Crop Protection Institute of Canada and Environment Canada.

2.2.1 The Review Team's Mode Paradigm

Earlier sections of the chapter have dealt with the overall development of a Review Team mode paradigm through the backdoor. The purpose at present is to draw out the major developments and themes more sharply, and to firmly anchor the discussion in the theoretical perspective of Chapter 3.

Let us begin with the substantive aspects of the Review Team's mode paradigm. Mode paradigms hinge on conceptualizations of what a mode for regulation is. In the case of the Review Team, this conceptualization changed over time. The June 1989 briefing book presented a highly structural interpretation. As remarked in Section 1.2, it focussed exclusively on locus, the formal site for locating responsibility for registration decisions. This picture of the mode for regulation undoubtedly reflected the upper hand of Leblond, Versteeg and others at the Review Team Secretariat. Nonetheless, it served as the Review Team's initial perspective on the mode for pesticide registration; it was from here that the Review Team launched into the choice process. Group deliberations, meetings with other policy community members and the RAB and Price Waterhouse studies fuelled a gradual rethinking. To structure were eventually added two other elements: resources (person-years and dollars) and processes. The scope of the Review Team's mode definition therefore radically extended over the course of a year and a half to the comprehensive design of an administrative system for delivering the government's registration function.

As conjectured in Chapter 3, the Review Team's basic mode concept linked with conclusions about the nature of the mode problem. The diagnosis inevitably changed as the Review Team rethought what the mode itself was. A structure-based mode concept corresponded with considering that the mode problem was, above all, a problem of reforming locus. Later, as explained in Section 2.1, there was a noticeable shift in the Review Team's priority concern to using reorganization as a way to reduce friction between the lead regulatory departments (Agriculture, Health and Welfare and Environment).

The Review Team's conceptualization of the mode for regulation demonstrated limited appreciation and respect for the normative standards of organizational design in government. This was true especially with the principle of ministerial responsibility. Tension resulted with the core advisers. The analysis below in Section 2.2 suggests that the cause was not so much ignorance per se, as the fact that many private sector stakeholders viewed the question of responsibility from a different angle.

The Review Team's mode perspective also accepted the concept of neutral ministers. Again, this baffled federal officials. In the latter's mode paradigm, neutrality was anomalous since every minister acted in multiple capacities. Ministers were voices in the policy process for their clients. Legislative, departmental and government priorities infused ministerial decision-making. Further, ministers

participated in the government's collective policy- and decision-making as members of the Cabinet. When ministers acted in this last capacity, the bureaucrats' mode paradigm presumed that they intervened on all matters of concern to them (i.e. because of their departmental duties or for any other reason). The absence of a statutory mandate was effectively irrelevant. In short, a Minister of Health and Welfare denied a formal role in pesticide registration could still hope to influence regulatory decisions through the Cabinet arena. The terms of the core advisors' mode paradigm denied that any minister - even a Minister of Science as a few Review Team members hoped - could make strictly objective pesticide registration decisions.

The Review Team's mode paradigm said very little about options. This undoubtedly reflected the state of knowledge about modes for regulation. From another standpoint, being vague about possible mixes of structure, resources and decision processes had tactical advantages. Section 2.1.2 observed that the amorphous ABMA coalition allowed momentum to develop around moving regulatory responsibility out of Agriculture. Later in the chapter, in Section 2.3, it will be shown that ambiguity was a precondition for the Review Team reaching consensus.

Chapter 3 argued that mode paradigms have procedural as well as substantive dimensions. In the 1989-90 phase of the PRR the critical procedural ideas and beliefs concerned participation in the mode choice. The core departments' territorial attitude toward the administrative apparatus for pesticide registration (see Sections 2.1.1 and

2.1.3 above) constituted a pillar in their mode paradigm which accepted an outsider role in proposing changes in the mode, yet firmly rejected more activist interventions by the Review Team. Review Team members, on the other hand, considered that their mandate from the Minister of Agriculture on locus required trespassing into the administrative domain. If they were going to recommend that the registration system be overhauled, it was only sensible and responsible, they believed, to make concrete suggestions about how this ought to be done. Divergent opinions about what interests were entitled to participate in choosing a mode for regulation helped account for the conflict documented in Section 2.1.3. Indirectly, then, procedure-related ideas and beliefs had repercussions for how the Review Team went about its mode choice.

The split over participation could be interpreted in several ways. One scenario wrote it off as a petty, insubstantial turf war. More likely, however, there was a deeper, important ideational basis, in particular for the departments' opposition to outsider participation in the mode choice. At Review Team meetings it seemed the core advisors perceived the mode as an administrative tool whose design ought to be left in the hands of experts (i.e. the bureaucracy). The basis for a fairness-like argument also hovered in the background. The advisory officials often acted as if they had a duty, as guardians of the public interest, to ensure that private parties who stood to gain or lose through the mode for regulation were excluded from the process of choosing it. While never stated openly, this last perspective on the mode for

regulation presumed that the machinery of government had a fundamentally political character.

2.2.2 Mode Paradigms Within the Policy Community

Without wanting to distort how (un)advanced thinking about the mode for regulation was, this section compares and contrasts the mode paradigms articulated by four interests: the Canadian Labour Congress, the Consumers' Association of Canada, the Crop Protection Institute of Canada and Environment Canada.³³ Analysis of these concrete examples helps to clarify the different sets of ideas and beliefs that fed into the Review Team's Pest Management Regulatory Agency recommendation.

2.2.2.1 The Canadian Labour Congress Mode Paradigm

The Canadian Labour Congress, Canada's largest labour organization, tabled one of the few formal proposals for a mode for regulation in the pesticide review. The plan submitted through the labour representative on the Review Team called for

³³ The first three of these organizations are profiled in Appendix A.

"a multistakeholder agency"³⁴ that would be part of "A New Pest Control Policy for Canada".³⁵ Significantly, the CLC's mode proposal came in the aftermath of the February 1990 Review Team meeting on locus.

The CLC's diagnosis of what ailed the registration system had been heard many times before: conflict of interest. It was incongruous, the CLC argued, that the Minister and Department of Agriculture regulated agricultural chemicals while carrying out other duties related to promoting agricultural technology (i.e. chemical pesticides).³⁶ The Congress maintained, moreover, that in point of fact effective pesticide regulation was systematically sacrificed in the name of production and technology.

The central plank in the CLC mode paradigm was the idea that pesticide regulation was social regulation, designed to protect the environment and human health. From this it was considered self-evident that regulatory responsibility must be moved from Agriculture to an independent regulatory agency "at the very least".³⁷ Neither a new department-based arrangement operating out of Health and Welfare nor

³⁴ See Canadian Labour Congress, "Proposal by the Canadian Labour Congress for a Multistakeholder Pesticide Registration Agency," a submission to the Pesticide Registration Review Team, April 1990.

³⁵ Canadian Labour Congress, Environment Committee, Department of Field Services, "A New Pest Control Policy for Canada," April 1990.

³⁶ Ibid., p. 16.

³⁷ Ibid.

one out of Environment was "entirely and exclusively appropriate".³⁸ Why, was not elaborated. The suggestion, though, was that both lacked competence.

The Labour Congress prescribed a "multistakeholder agency [...] with considerable policy making and administrative power". This agency would be responsible for both pest control product management (i.e. registration) and pest management promotion. The April 1990 proposal to the Review Team further declared:

The issue of the role of "stakeholder agency" involvement in the pesticide registration and regulation system is not one of whether or not there should be a stakeholder agency, but rather is one of what the scope of any stakeholder agency should be. The question that must, therefore, be addressed is one of the magnitude of public participation in the overall process."³⁹

By public participation the CLC had in mind a 15-person decision-making body, with membership from labour, environmental and alternative agriculture groups, pesticide manufacturers, growers, the medical community and consumer groups. This essentially replicated the Review Team structure. The multistakeholder agency concept was also similar to the Quebec Occupational Health and Safety Commission and worker compensation boards in other provinces in that it included an inter-departmental committee of senior bureaucrats to support agency decision-making.

³⁸ Ibid.

³⁹ Ibid., p. 1.

Finally, the CLC's mode perspective dealt with the issue of accountability. What was unique was the respect paid to the norms of parliamentary government and the notion of political accountability. The priority was admittedly on establishing accountability links for regulatory decision-making with interests across all segments of the pesticide community. However, the CLC paradigm also stressed the importance of holding the regulator accountable to Parliament, through the Minister of Labour and an appropriate standing committee.

The yawning gap in the CLC perspective was a spirited defense of the multistakeholder agency concept. The April report merely asserted that the proposed organizational arrangement satisfied a panoply of ambiguous standards, from the Review Team's six principles test to the federal government's regulatory policy to the requirements for practical decision-making. The Review Team's deliberations demonstrated that substantiating or justifying these kinds of claims was part and parcel of the central dilemma of choosing a mode for regulation.

2.2.2 The Consumers' Association of Canada Mode Paradigm

For a number of years the Consumers' Association of Canada had been on record as favouring a free-standing agency for pesticide registration, one that reported to any minister but the Minister of Agriculture. A Canadian Radio-television and

Telecommunications Commission - for pesticide registration - was what the Association contemplated. Like the Canadian Labour Congress, the CAC diagnosed the mode problem as the Minister of Agriculture's conflict of interest. For the CAC, however, the offending conflict was between ensuring food safety and promoting food production.

The CAC's mode paradigm underwent an interesting transformation as the pesticide review proceeded.⁴⁰ A meeting of the CAC caucus in April 1990 cast light on what happened.⁴¹ At that meeting, the CAC's Review Team member disclosed that the Team had discovered "several good arguments against" a stand-alone agency. Two arguments were reported as especially compelling: the impossibility of neutral ministers in a parliamentary system of government where ministers are collectively accountable for government policy- and decision-making in the House; and the danger of losing the free-ride on departments' part-time pesticide resources with an agency-based registration system. Commenting on the current state of thinking on the Review Team, the CAC delegate said: "The general feeling now is that if [the Review Team] develop[s] a really good system it will work well whatever the location." This report-

⁴⁰ The CAC surveyed its membership to determine what issues would be given priority in the pesticide review. Locus was identified as the second most important issue, after the criteria for assessing health and environmental impacts and before the role of risk management in regulatory decision-making.

⁴¹ As reported in miscellaneous notes summarizing a CAC caucus seminar on April 12, 1990. These notes, now collected in the pesticide review files, were probably prepared by Jennifer Hilliard, the CAC's delegate on the Review Team.

back session reverberated in the Review Team's mode choice because the caucus consented to its Review Team member returning to the table with a mandate to treat the CAC's previous hardline mode position as negotiable.

The Consumers' Association confirmed the decision criteria in its mode paradigm on the eve of the Review Team releasing the July 1990 preliminary report. Any reform had to restore sagging public confidence in pesticide registration. Further, the choice between a stand-alone agency and a department had to be made "on the basis of which is the most cost-effective system".⁴²

In the dynamics of the 1989-90 mode choice the CAC became a critical switcher. The CAC Review Team member skilfully directed a reconceptualization of the mode solutions in the consumer sector, eventually persuading her constituents that the two decision criteria could be met by moving the registration system from the Minister of Agriculture to "a different department" in the summer of 1990. In a perfect world, this would be Health and Welfare; given Health and Welfare's already heavy regulatory workload, the caucus accepted Environment as "a second choice."⁴³ The switch in mode-related thinking was temporary. Section 2.3 explains that there were no reservations at the CAC about signing onto the Review Team's final

⁴² Consumers' Association of Canada, "A Position Paper on the National Pesticide Registration System," Ottawa, June 1990, p. 1.

⁴³ Ibid.

recommendation for a Pest Management Regulatory Agency. This was proof positive that in the CAC paradigm decision criteria did not match one-to-one with organizational arrangements for regulation.

2.2.2.3 The Crop Protection Institute of Canada Mode Paradigm

The Crop Protection Institute of Canada articulated the most sophisticated mode paradigm amongst non-governmental interests in the policy community. This signalled the importance attached by the Institute to resolving the mode issue, but also reflected the relatively extensive independent analysis CPIC undertook in the hopes of finding a viable compromise.

As explained in Chapter 5, CPIC believed there was one main problem with the existing registration process: the core departments' diverse approaches to pesticide toxicology. The Institute without hesitation named Health and Welfare's Food Directorate and the Health Protection Branch as the key bottlenecks in the system. In CPIC's mode paradigm, Health and Welfare's slow processing time explained why registration took so long in Canada compared to other countries.

Managerial themes predominated in CPIC's perspective on the mode for pesticide registration. The Regulatory Reform Committee at CPIC announced that the

industry's basic goal in the pesticide review was an efficient registration system that resulted in products being registered in the "shortest time consistent with public safety."⁴⁴ One review participant summed up the emphasis on management in this way: choosing a mode for registration is "a simple business issue".⁴⁵

The management perspective infused CPIC's interpretation of the Review Team principle of accountability. The Institute's spokespersons in the review pushed for holding managers in both the public and private sectors accountable. In the regulatory bureaucracy, the type of accountability demanded - for results and improved predictability - was in line with the PS 2000 and Increased Ministerial Authority and Accountability principles of empowerment.⁴⁶ But intriguingly, the industry mode paradigm also put a private sector spin on the accountability issue, arguing that improved accountability meant guaranteeing registrants knew in advance what they were accountable for in the evaluation process (e.g. the data submission requirements for registration). The concept of political accountability was without question not part of the industry's vocabulary.

⁴⁴ Confidential interview. The role of the Regulatory Reform Committee is described in the profile of CPIC in Appendix A.

⁴⁵ Confidential interview.

⁴⁶ See Paul M. Tellier, "Public Service 2000: The Renewal of the Public Service," *CPA*, 33:2 (summer 1990), pp. 123-132; and, on the federal government's IMAA initiative, see Treasury Board of Canada. Increased Ministerial Authority and Accountability: Introduction and Progress Report (Ottawa, January 1988). The very limited success of IMAA has been assessed by John L. Manion in "Notes for a Presentation to the Dalhousie Conference on Career Public Service" (Ottawa: Canadian Centre for Management Development, October 1990).

In parallel fashion, CPIC's mode paradigm was informed by a distinctive approach to efficiency. The farm sector bowed to global efficiency in agricultural markets. While not unsympathetic to the international competitiveness of Canadian agriculture, the Institute, in contrast, considered managerial efficiency the determining factor in selecting a mode for pesticide registration. Efficiency for the industry translated as quick, cost effective registration. There was only a slim international connotation; the Canadian registration process had to be as quick and cost effective as those of the major trading partners.

The CPIC perspective epitomized an instrumental view of the mode for regulation. The problem, an inordinately slow registration process, has been described already. The suggested solution: a reformed mode, along with increased harmonization with other country's regulatory regimes. The industry's paradigm also comprehensively spelled out allegedly appropriate mode reforms. These included timelines for regulatory decisions, clear assignments of responsibility and accountability and a tracking system to give interested parties a window on the current status of submissions.

CPIC believed strongly in the benefits of a single site for registration decision-making. Ideally - and it was a point the Institute was prepared to defend - this would be Agriculture because pesticide registration (in the industry's terms of reference) was an agricultural matter. Under the influence of Review Team deliberations and its own

investigations, CPIC's perspective evolved to embrace the principle of "a single focus". This freed up the industry to contemplate other mode options. In effect, the new principle rendered the structural aspect of the mode for regulation a negotiable item for the CPIC Review Team members, provided greater efficiency could be achieved through the mode chosen.

Under whose wing the single focus would regulate was the key missing link in the CPIC paradigm. The Institute's contention that a minister should see advantage in a pesticide regulatory body that operated at arm's-length because it put a highly controversial public policy issue at a safe distance found few sympathizers. Further, there was great uncertainty about the effectiveness of different approaches to ensuring the chosen regulator took both benefits and risks into account in registration decisions. As Section 2.3 explains, this last issue weighed heavily in the final trade-offs necessary for Review Team agreement on a mode for regulation.

2.2.2.4 The Environment Canada Mode Paradigm

The procedural features of Environment's mode paradigm generally coincided with the description in Section 2.2.1 for the core departments. On the substantive plane, however, Environment stood apart.

The central idea driving Environment's participation in the mode choice was the possibility of a mandated responsibility in the pesticide registration system. There were two issues: winning a clear statement, in legislation, to the effect that the Minister of Agriculture had to seek advice from the Minister of Environment; and ensuring that this advice went on the public record. Officials at Environment believed that this type of mode arrangement would give their minister a de facto veto power over registration decisions. Moreover, this option was judged do-able. From where the Department sat, there was no doubt the PCPA would be amended as a result of the pesticide review. There had also been signals from the Justice Division at the Privy Council Office that the Department's mode proposal would not raise serious objections.

It is instructive to consider what Environment's mode paradigm rejected. The Department had no aspirations for a formal veto power, primarily because it was anticipated that this would lead to parliamentary gridlock amongst all the ministers involved in registering pesticides. Nor did Environment want to assume (sole) legal responsibility. This was mainly for strategic reasons. Taking over the registration system implied wrestling responsibility away from an established minister. Moreover, it was believed that where legal responsibility resided was in a sense a non-issue since the environmental agenda would affect pesticide registration regardless of who regulated.

The other important element in the Department's mode paradigm was acute appreciation of the lack of policy community support for an Environment-centered registration system. Senior officials acknowledged that their department was a relative newcomer on the scene, and that it was too short on regulatory expertise and experience to successfully assume the pesticide registration function. There was some indication as well in consultations with the Review Team that Environment grasped the inherent limits of environmental risk assessment. The resulting conclusion - that assessments about the acceptability of risks would always be political - did not appeal to the Department.

2.3 The Decision Style

The final independent variable in Chapter 3's explanatory framework is the decision style. The rules and practices governing how the policy community goes about choosing a mode for regulation affect the distribution of power amongst political actors and, hence, the mode ultimately chosen. This section examines the decision style behind the Review Team's Pest Management Regulatory Agency recommendation. The macro decision rules of negotiation, viability and consensus and their influence on the 1989-90 mode choice are investigated in Section 2.3.1. Section 2.3.2 considers the micro management aspects of the Review Team's approach to settling on a mode. Finally, Section 2.3.3 uses stakeholders' late 1990

final offers to illustrate the interplay effect of the decision style with interest politics and mode paradigms in the Review Team's choice about a mode for registration.

2.3.1 The Macro Decision Rules

The Review Team's mode choice was informed, at the macro-level, by the rules (or practices) of negotiation, viability and consensus. This section examines each of these three aspects of the decision style and their implications for choosing a mode for pesticide registration.

2.3.1.1 Negotiation

The Review Team phase of the pesticide review conformed to the regulatory negotiation model described in Chapter 3, with two important exceptions. The differences must be acknowledged. The Review Team's membership was smaller (at a dozen) than the 20-25 interests usually prescribed for successful regulatory negotiation. More significant, however, was the status of the regulators, Agriculture and the core departments. They were not even parties-at-interest. Despite Mazankowski's original plan, the regulators were eventually frozen out of the Review

Team and so had effectively no decision-making role vis-a-vis the mode for regulation at this stage of the review. They were only advisors.

The dominant feature of the Review Team phase was carefully orchestrated multi-lateral bargaining or negotiation. In this, the 1989-90 period epitomized the model of negotiated regulation. There is debate about whether this model was consciously adopted. One argument is that a negotiation dynamic evolved naturally from stakeholders being exposed at Review Team meetings to divergent positions on reform, and from the two-tier caucus arrangement. The Review Team's reliance on a negotiation-based decision process could also be attributed to Leblond's background in labour negotiations. Whatever the explanation, the negotiation dynamic was the critical reason why, after 18 months, the Review Team settled on the Pest Management Regulatory Agency.

As explained in Chapter 3, a number of conditions had to be met for the "reg neg" model to work. In particular, members of the Review Team had to be willing and able to compromise on the terms of pesticide regulatory reform. The 1989-1990 experience showed above all that Team members - and their constituents in the policy community - valued the 20 issues differently. Inter-interest concessions were therefore more likely in some areas than others.

Willingness and ability to make compromises pertinent to the mode for regulation was determined by many factors. For some review participants, such as the Crop Protection Institute and the pesticide industry, finally bringing closure to the whole issue of reform was the driving force. For others, continuing to invest organizational and person resources in pesticide reform simply no longer made sense after over a decade of stalemate. Compromise was also facilitated by an instrumental desire to achieve particular objectives (e.g. an improved registration system). Finally, there was the important notion of log-rolling. Concessions on the mode for regulation allowed Review Team members and their constituents to record gains in other areas of pesticide reform.

The explicit negotiation of the 1989-90 period and its impact on the mode choice is best illustrated by reference to the Review Team meetings immediately preceding release of the final report in December 1990. This analysis is saved for Section 2.3.3. At the present time, we observe only that these meetings were difficult, lengthy negotiation sessions featuring "some gross horse-trading".⁴⁷ They determined the essential compromise character of the Pest Management Regulatory Agency recommendation.

The Review Team's overwhelmingly negotiation-based decision style meant that, in the end, there was stakeholder support for an overall package of pesticide

⁴⁷ Confidential interview.

reforms, not for the constituent parts of the package. Specific recommendations therefore often lacked strong champions. The analysis in Section 2.3.3 shows that this was largely true for the Review Team's mode choice, the PMRA-Minister of Health and Welfare combination. The repercussions were in the long-term. Chapter 8 argues that the lack of champions goes a long way toward explaining the federal government being at liberty, in a political sense, to ignore or circumvent the Review Team's PMRA recommendation in 1991-92.

2.3.1.2 Viability

Viability was far less developed as an element in the Review Team's decision style than negotiation. Chapter 5 indicated that viability extended to the political, bureaucratic and fiscal. The Review Team agreed as a group that this three-part test would be applied to recommendations in every issue area.

The viability rule, like negotiation, was motivated by a concern that the Review Team's recommendations be implemented by the government. It had originally been proposed by the farm and pesticide manufacturing sectors, whose representatives wanted a rough tool with which to be able to blunt the radical reforms expected from environmentalists. In general terms, however, the viability rule was a safeguard for the Review Team. It was a way to avoid recommending a mode for

regulation that was a non-starter either because politicians or bureaucrats were unreceptive to it, or because of its high costs.

Inevitably, conflicts arose. Mode options that were thought to be politically viable, for instance, were not necessarily viable from the bureaucracy's viewpoint. The Review Team-core department relationship assessed earlier in the chapter is an excellent case of one kind of viability having to give way to another, competing one. The mode recommended to the Minister of Agriculture was one that the Review Team knew in advance did not have support from bureaucrats and moreover considered could be delivered at substantially less cost than the core departments estimated. On the bureaucratic viability test, then, it failed.

The need for trade-offs also transpired along a single plane of viability. What was politically viable from the point of view of one minister/department, was not necessarily politically viable for another. There was sometimes even variance within the same portfolio according to Cabinet shuffles. Mazankowski as Minister of Agriculture expressed his willingness to pass pesticide responsibilities over to another department, and given his stature would probably have been able to pull it off. His successors, however, either jealously guarded this area of their mandate, or could see no way of successfully passing the buck (see Chapter 7).

2.3.1.3 Consensus

The third macro decision rule flowed closely from viability. This was that the Review Team would try at all cost to reach consensus decisions. As explained in Chapter 5, the rationale behind striving for unanimity was to improve the chances for implementation, by constraining the options open to the Minister of Agriculture.

The Review Team and Leblond accepted the conventional wisdom that the Minister could not ignore a set of recommendations with unanimous backing from stakeholders. In the chair's eyes, facilitating consensus around the Review Team table was perhaps his principal - and most challenging - function.⁴⁸ Consensus, combined with the viability test, was supposed to be the Review Team's ironclad guarantee that the reforms it recommended would be implemented, expeditiously, by the government.⁴⁹ Limits on the constraining power of consensus became obvious in 1991-92, as Chapter 7 explains.

⁴⁸ Leblond claimed, moreover, that he did not have the authority to make unilateral recommendations to the Minister of Agriculture.

⁴⁹ Dissent was always recognized as a possibility, and the Review Team eventually had to deal with it in relation to the CLC's refusal to support the final package of proposed reforms in December 1990.

2.3.2 Micro Managing the Decision Process

In addition to negotiation, viability and consensus, there were micro dimensions to the Review Team's decision style. Several proved crucial to the Pest Management Regulatory Agency choice.

Take the "designing-a-house" principles approach adopted by the Review Team in the autumn of 1989. As noted in Chapter 5, the Review Team attacked its 20 issues within the parameters of a conceptual framework based on six fundamental principles. Each principle was matched to mechanisms. Locus, for instance, was considered to be a mechanism for achieving a regulatory system that was: accountable, responsible, efficient, fair and equitable; responsive and adaptive; and supported the development of policies that assist economic viability and the competitiveness of Canada's farm, forestry and fishery sectors. This kind of approach for deciding on a mode for regulation was more likely than others to lead to a mode recommendation that ignored practical considerations, such as whether or not it had support in the bureaucracy. Nor did the principles approach avoid the pitfalls of internal contradictions and trade-offs, similar to those discussed in the earlier section on viability.

More definite conclusions can be drawn about the consequences of the Review Team's strategy of delay. Originally planned to be resolved by May 1990, the mode

choice was repeatedly put off. Circumstances perhaps required this. Review Team members discovered early on in their meetings that the mode was amongst the most intractable issues - a shaky knowledge base, hardline negotiating positions on the part of several stakeholders and conflict, documented in Section 2.1.3, with the core departments. Delaying a choice was the strategy Leblond advised as Review Team chair. This would allow the Team to wrap up less contentious issues first. That done, members could confidently report successes in other areas to their constituencies before asking them to be flexible about the mode. The successes, of course, had to be in areas highly valued by interests in the members' home policy community sectors if the strategy was to serve its purpose of facilitating overall consensus.

2.3.3 Regulatory Negotiation in Action

By late November 1990, following consultations with the public, the Review Team had fixed on an agency-based mode for pesticide registration (see Section 2.1). The critical outstanding issues threatened from time-to-time to upset the entire review process: to whom should this agency report and how independent should it be from ministerial influence. As the Review Team's mandate came to a close, the offer on the table was Proposal C of the "Proposed Federal Pest Management Regulatory System". This included a Pest Management Regulatory Agency that "report[ed] directly to the Minister of Health and Welfare, but [would] be separate from the

Department of Health and Welfare as well as from any other federal department or agency." The PMRA-Minister of Health and Welfare combination represented the point at which, after 18 agonizing months, the Review Team's highly polarized debate on the mode for regulation had "coalesced".⁵⁰

Three camps arrayed themselves around the proposed mode for regulation. One group of stakeholders opposed it and was unable to force change. The other two were prepared to give their seal of approval, either unconditionally or having won concessions. The final offers of the relevant interests are examined here in-depth because they show the fragility of consensus on the Review Team's mode choice. Juxtaposing the offers with the mode arrangement in Proposal D (and the December 1990 report) serves as a way to gauge influence on the mode choice at this point in the pesticide review. As the discussion reveals, the negotiation dynamic, interest politics and mode paradigms came together in a package of reforms with consensus-but-one support.

The chief hold-outs on the Pest Management Regulatory Agency-Minister of Health and Welfare mode were the Canadian Environmental Network, the farm sector and the Canadian Labour Congress. For CEN's two Review Team members, the proposed agency was highly problematic. They put an alternative on the negotiating table, a department-based arrangement similar to the Federal Environmental

⁵⁰ Confidential interview.

Assessment Review Office. The crux of the problem with the proposed mode was the reporting relationship. The belief in environmental quarters was that a registration system actively directed by a minister and a department constituted the most effective tool for public accountability. Appointing the Minister of Health and Welfare a figurehead keeper of the registration system was therefore not good enough; the Minister had instead to be a hands-on player in regulatory decision-making.

The environmental representatives eventually agreed to sign on to the final report despite their reservations about the mode. A deal was possible because CEN judged that the less than desirable mode was counterbalanced by progress in other areas of regulatory reform. The key gains included improved access to information, the Pest Management Promotion Office and the Pest Management Act's emphasis on reducing pesticide use.

The final offer from the Canadian Federation of Agriculture and the Canadian Horticultural Council included eight conditions for accepting Proposal C. One affected the mode. For the package to be acceptable, there again had to be direct ministerial involvement in registration, but this time from the Minister of Agriculture. Reverting back to the July triad proposal with a supporting committee of directors-general was recommended.

The farm sector, like CEN, was nevertheless prepared to approve Proposal C's mode. The compensation principle played out once more. In this case, the sectoral wins included programmes for minor use pesticides and label expansion, and plans for greater Canada-U.S. harmonization on pesticide regulation. Another factor helped make the mode palatable. Chapter 7 argues that farm leaders counted on being able to deflect the agency-Minister of Health and Welfare combination through old-style pressure politics at the ministerial level.

The last hold-out was the Canadian Labour Congress. In contrast to CEN and the CFA/CHC, the CLC refused to abandon the idea of a multistakeholder pesticide agency (see Section 2.2.2.1) - as well as other elements in its proposed pesticide policy for Canada. The CLC had formally tabled objections to the Review Team's proposed reforms as early as June 1990, in advance of the preliminary report. In December, the organization ordered its delegate on the Team to withhold endorsement of the final package of recommendations.⁵¹

There was a subtle difference with the prevailing attitude amongst industry interests on the Review Team. Delegates from the Crop Protection Institute and the Canadian Manufacturers of Chemical Specialties (and the biologics caucus) announced

⁵¹ In the last weeks of negotiation the CLC pressed for the right to have its dissenting opinion included in the final report. Tense bargaining ensued. The Review Team eventually agreed to a short appendix.

in the late rounds of bargaining that their sectors were prepared to approve the reforms in Proposal C, but not without reservations. Subsequent negotiations proved that this camp of interests carried enough influence to be able to translate their reservations into changes to Proposal C.

The main outstanding concern related to risk. Both CPIC and the CMCS demanded assurance that Health and Welfare's risk orientation would not dominate the registration system; or, put another way, that the benefits of pesticide use would always be given a fair hearing in regulatory decisions. The fear, in a nutshell, was that the Minister of Health and Welfare's involvement in the mode ensured institutional expression for a regulatory approach that systematically underestimated the economic and other benefits of using pesticides. This was really a reflection of the larger controversy in the policy community about the role of risk/benefit or value assessment analysis in pesticide registration.

The issue about the mode, then, from both CPIC's and the CMCS's perspective was how to ensure benefits were taken sufficiently into account. The CMCS argued that the mode proposal should be revised, to a reporting relationship through the Minister of Agriculture, or to the July triad of ministers. For CPIC, the preferred arrangement was a department-based system attached to Agriculture. The second best solution was described in generic terms: "it is essential that the decision

making section make clear reference to a risk/value management decision framework."

The main trade-off or compensation for industry interests was improved efficiency. CPIC and the CMCS held steadfastly to the belief that there would be net efficiency gains from a stand-alone agency that brought pesticide regulators together under one roof. The presumed benefits were of such magnitude that CPIC was prepared to make concessions on data protection (to environmentalists and farm sector) and grower import (to farmers) in return for any kind of stand-alone agency.

The most important point, however, was that CPIC (and the CMCS) saw in the overall package of reforms in Proposal C an improved regulatory system. If leaving the Minister of Health and Welfare in charge of the Pest Management Regulatory Agency made consensus possible, the CPIC delegates were instructed to sign on to the agreement for political reasons. Signing, one CPIC official later explained, was "worth doing to get consensus in other areas."⁵² The other important consideration for CPIC was not wanting to jeopardize having the recommendations implemented because they lacked unanimous stakeholder support. Nevertheless, the Pest Management Regulatory Agency-Minister of Health and Welfare combination was "a hard sell"⁵³ for CPIC's leadership.

⁵² Confidential interview.

⁵³ Confidential interview.

What made the proposed mode acceptable was that the CPIC representatives successfully negotiated a pair of protective mechanisms. The words "self-contained" were added to the description of the PMRA's relationship with the Minister of Health and Welfare. The other change was a revised regulatory objective:

Recognizing the principles of sustainability, the objective of the Pest Management Act is to protect human health, safety and the environment by minimizing risks associated with pesticides, while enabling access to pest management tools, namely pest control products and other pest management strategies.

The reworded statement of objective essentially recommended statutory expression for the philosophy of balancing risks and benefits, with the attendant expectation that this would establish the standard for regulatory decision-making in the new registration system. It is important not to lose sight of the fact that linking pesticide registration with the Minister of Health and Welfare itself constituted protection for industry interests, in the sense that this proposed re-assignment of regulatory responsibility addressed public fears about lower safety standards because faster product reviews (industry's main objective) were being done by the Minister of Agriculture.

The third camp in the last rounds of negotiation consisted of stakeholders prepared to throw their support unconditionally behind the PMRA-Health and Welfare mode proposal. Only one group, the Consumers' Association of Canada, genuinely fit this category. The CAC's position - and, more important, the organization's corresponding refusal to countenance an alternative mode for registration - drove compromise as the Review Team's mandate wound down in December 1990. There

was a small supporting cast, however, of interests in the policy community for whom the mode for regulation fell fairly low on the list of priorities at this point. Proposal C's mode raised no deal-threatening objections from the forestry caucus, the CMA/CPHA delegate, or the representative from the biologics sector.⁵⁴

3.0 SUMMARY

The 1989-90 period of the federal pesticide review produced a first choice about the mode for regulation. The Review Team, after prolonged debate, settled on an independent Pest Management Regulatory Agency that would nominally operate under the wing of the Minister of Health and Welfare. This chapter sketched mode choice #1 (in Section 1.0) in detail, and then analyzed it using the dissertation's conceptual lens of interest politics, mode paradigms and the decision style (in Section 2.0).

The choice of mode for regulation in 1989-89 was, in the first instance, about structure. The central question the policy community asked was: who should

⁵⁴ The forestry caucus had been amongst the first to conclude that an agency-based mode could deliver on improved efficiency. See Forestry Caucus, "Comments on the Efficiency of the Proposed System," May 1990. The biologics sector's fundamental conditions for accepting Proposal C included: "Locus must be, in some way, strongly binded to Agriculture." The position was not firm, however; the Review Team member was not prepared to let it stand in the way of consensus.

regulate? Many stakeholders supported the concept of a pesticide agency from the very start. They were unsuccessful, however, at determining the mode choice because of a number of factors. These often concerned difficulties filling in the knowledge base and understanding - and agreeing on - the nature of the options. As Section 2.1 described, the mode for regulation evolved into a highly charged issue combining both politics and administration. The trend accelerated when the resource dimension of choosing a mode for pesticide registration took over centre stage under the direction of bureaucratic interests in the policy community.

Section 2.2 investigated the mode paradigms underlying the 1989-90 mode choice. Most ideas and beliefs in the policy community about the preferred machinery for government regulation were relatively undeveloped. Taken together, however, they showed in convincing fashion that political actors came to the process of organizational design with distinctive empirical pictures about modes for regulation. The Review Team as a whole, on the other hand, articulated a fairly sophisticated mode paradigm. Procedural aspects were more deeply entrenched in it than substantive ones. Moreover, there were important conflicts with the organizational mythologies presented - and espoused - by the pesticide bureaucracy.

The last part of the chapter, Section 2.3, addressed the decision style variable. The dominant feature of 1989-90 was the presence of a formal negotiation dynamic. Constituencies in the policy community were forced to make trade-offs and

concessions as the Review Team went about designing a new mode for regulation.

The "reg neg" model - combined with other macro and micro decision rules - determined the essential compromise quality of the arrangement selected in 1989-90 as the preferred mix of structure, resources and processes for pesticide registration.

Chapter 7

MICRO ANALYSIS: THE CHOICE OF MODE FOR REGULATION #2

This chapter analyzes the 1991-92 period of the pesticide registration review. The federal government's February 1992 decision to fine-tune the existing Agriculture-based mode for regulation is explained as the product of interplay amongst interest politics, mode paradigms and the decision style.

The chapter's structure roughly parallels that in Chapter 6. Section 1.0 revisits, very briefly, the dependent variable in the second stage of the pesticide review. Section 2.0 sketches an overview of the mode choice. The federal government's 1992 mode choice is examined at length in Section 3.0, using the dissertation's three-part theoretical framework.

There were fewer layers of activity in the 1991-92 period. This is necessarily reflected in the chapter's analysis of choosing a mode for regulation. The message for building a solid theoretical perspective, however, is that mode choices vary enormously in their richness and complexity. Some stand out as having obvious theoretical intricacy or substantive importance. Others mask their real significance in apparent simplicity.

Section 3.0 explains that the driving issue in the 1991-92 period was balancing the policy community's demands for an improved registration system with the fiscal reality. Insiders successfully sanitized the mode choice from the highly charged political-administrative issue that it had become under the Review Team to a simple matter of internal plumbing. In the end, politics of another kind - ministerial preferences and partisan political priorities - artfully infused the mode choice.

There were two separate mode outcomes from the pesticide review, both chronologically and conceptually (see Chapter 1). It is nevertheless important to keep in mind throughout the analysis in this chapter that the outcomes or choices were also connected. In settling on a revised version of the status quo, the Minister of Agriculture and his colleagues effectively rejected the Review Team proposal for an independent agency arrangement. The relationship between the mode choices is directly confronted in the last chapter of the dissertation (Chapter 8).

1.0 PRELIMINARY COMMENT ON THE DEPENDENT VARIABLE

Before proceeding to the main analysis, it is essential to be clear about the dependent variable. The 1991-92 mode choice, contrary to the federal government's February 1992 press release, did not represent the victory of an inter-departmental

organizational arrangement for pesticide registration.¹ The only accurate interpretation of 1991-92 was that the mode proclaimed by the government was the inescapable outcome, given the abrupt, superficial way in which the agency-based alternative had been discarded by the bureaucracy.

Therefore, to understand fully the choice of mode for regulation made in the last stage of the PRR, it is necessary to appreciate the two sides of the coin: 1) a revised department-based registration system was chosen; and 2) regulation by an agency was rejected. The emphasis in the chapter is on the latter. This is justified because 1991-92 was an exercise in responding to the Review Team's recommendation for an independent Pest Management Regulatory Agency. Further, as Sections 2.0 and 3.0 demonstrate, this squares with the policy community's approach to choosing a mode for registration.

2.0 OVERVIEW

The Pest Management Regulatory Agency was the most controversial recommendation in the report delivered to the Minister of Agriculture in December

¹ What the government billed an inter-departmental mode was actually better described as a fine-tuned version of the existing single-minister headed registration system. The government's 1992 mode was still a work "in progress" as of the fall of the 1994 (see Chapter 8).

1990.² Much of the reaction was predictable. The farm sector's opposition targetted the proposed tie with Health and Welfare. Agriweek described the PMRA as a major victory for "the ecomaniac fringe"³ and AgCare, an umbrella organization for 10 small Ontario commodity groups, threatened to take every step necessary to keep the registration system at Agriculture Canada. A few analysts considered that Canadians would reap rewards from attaching regulatory responsibility, even tangentially, to the Minister of Health and Welfare because health would then naturally be the top regulatory priority.⁴

In point of fact, the Review Team itself had not been very optimistic that the government would act to remix the mode for regulation in the manner proposed. The biggest fear was that the PMRA-Health and Welfare arrangement would be denied a fair hearing with ministers. Team members extrapolated from 1989-90 that senior bureaucrats in the core departments would pre-empt mode options that threatened their entrenched roles and responsibilities in the registration system. The problem of budgets already being stretched to the limit was another story. This had been the theme stressed by the core departments during 1989-90 (see Chapter 6). Nevertheless, members of the Review Team were skeptical. They felt confident that

² See Martin Mittelstaedt, "Panel Wants Pesticide Use Cut Back".

³ Agriweek, January 14, 1991.

⁴ Jim Romahn, "Pesticides Report Deserves Award". For another positive assessment of the Review Team's final report see Heather Saranpaa, "Pesticide Panel Would Create New Regulatory Agency".

resource pressures could be surmounted with cost recovery, particularly as both industry and farm interests had expressed their readiness to pay for a system that registered products effectively and quickly. The chapter's subsequent analysis shows that this was a serious misjudgement about the determining obstacles to an agency-based mode for regulation.

Chapter 5 detailed the intra-governmental process set up by Mazankowski to formulate a corporate response to the Review Team report. To recap, the Pest Management Working Committee at Agriculture's Bureau for Environmental Sustainability evaluated the various recommendations. This involved more than a year of often intense discussions amongst government stakeholders. The interest politics, mode paradigms and decision style underlying the mode aspects of the debate are investigated in the next section (Section 3.0).

At the present time, the point is the distinguishing features of the 1991-92 period. The choice process was much less deliberate compared to 1989-90. The final mode outcome accordingly could not be tied to specific meetings, studies and draft reports as had been true with the Review Team (see Chapter 6, Section 1.0). On the contrary, the second mode choice in the pesticide review was characterized by a highly restricted and often counterproductive debate regarding the preferred organizational arrangement for pesticide registration. The Review Team's proposal for an agency-based mode for regulation, as one policy actor bluntly put it, was

almost immediately rejected "without any serious consideration at all."⁵ In Kingdon's terminology, it could not push its way onto the already crowded agenda for government action.⁶

However unstructured and narrow it was, the inter-departmental struggle to find consensus on reforming the registration system culminated in a November 1991 memorandum to Cabinet sponsored by Agriculture Minister Bill McKnight.⁷ The MOU presented ministers with three mode options:

- 1) the status quo, which was suggested to be manifestly unacceptable across the board;
- 2) an inter-departmental model (this option is described and assessed in the dissertation's Postscript, for reasons explained there); and
- 3) an independent agency which, in all the essentials, was the Review Team's PMRA.

The options in the MOU were accompanied by strong advice against choosing an agency mode. PMWC officials had concluded that, while the costs for an agency were probably "substantially less" than calculated by the core departments in 1990 (see Chapter 6), they were still "horrific", especially when start-up costs were

⁵ Confidential interview.

⁶ Kingdon, Agendas, Alternatives, and Public Policies. See especially Chapter 5 dealing with how problems attract the attention of policy-makers.

⁷ The following three paragraphs are based on confidential interviews with a number of senior government officials.

included. Moreover, there were thought to be significant personnel-related downsides to an agency, such as isolating scientists from their colleagues, bad career paths for agency staff, and heightened competition amongst departments and the agency for qualified toxicologists who were already in short supply.

On the political side, the factors weighed in equally - if not more heavily - against an agency-based registration system. The Minister of Health and Welfare had been advised by his officials to send clear signals into the inter-departmental arena that any attempt to foist off regulatory responsibilities inconsistent with a statutory mandate to ensure and protect the health of Canadians would be strenuously fought. The final nail in the coffin, if there needed to be one, was that creating a large new bureaucracy to regulate in a relatively narrow area was dead in the water in Mulroney's restraint-driven Ottawa.

3.0 ANALYSIS OF THE MODE CHOICE

As in Chapter 6, the remainder of the chapter uses the interest politics-mode paradigms-decision style framework to explain the federal government's chosen mix of structure, resources and processes in the mode for pesticide registration. Section 3.1 addresses several important dimensions of interest politics during 1991-92. Mode

paradigms and the decision style underpinning the second mode choice in the pesticide review are investigated in Sections 3.2 and 3.3 respectively.

3.1 Interest Politics

Several important axes of interest politics in the 1991-92 period of the federal pesticide registration review are analyzed in this section. Section 3.1.1 examines the overall structure of the policy community through the lens of insiders and outsiders, and pays particular attention to the separate shaping power of bureaucrats and ministers over the mode selected for regulation. Section 3.1.2 addresses the inter-departmental axes of politics involving Agriculture Canada, the core advisory departments and central agencies such as the Privy Council Office. The third development in the PRR's second mode choice was the return to old-style clientele politics between the Minister of Agriculture and Canada's farm sector; it is examined in Section 3.1.3. The analysis of interest politics concludes with a short discussion of the implications for choosing a mode for regulation of the post-December 1990 relationship between the non-governmental policy community and departmental interests.

3.1.1 Insiders and Outsiders in the Policy Community

The 1991-92 phase of the pesticide review marked a return to the familiar approach to designing the administrative machinery for government regulation in Canada, characterized by executive and bureaucratic preeminence (see Chapter 3). This confirmed the shifting nature of the line between insiders and outsiders in mode choices. In the Review Team stage there had been a relatively unbalanced playing field between governmental and non-governmental interests in terms of their ability to influence the mode settled on for pesticide registration. It had tipped in favour of private sector stakeholders. At this time, the distribution of power resembled the model of a state-directed policy community.

The policy community's structure was again partly a consequence of the particular review process employed by the Minister of Agriculture. Formulating a government (or corporate) response to the Review Team report called for a horizontal, cross-department evaluation process. Furthermore, PMWC officials decided to exclude external interests, on the grounds that duplicating the intelligence already ably collected, interpreted and synthesized by the Review Team was unnecessary. The third stage of the PRR was therefore very much a closed shop of government interests.

However, the boundary line between insiders and outsiders in the policy community also shifted for more theoretically interesting reasons. The shift was not solely attributable to the nature of the Minister's review process. Nor was it simply a matter of separating government from non-government members of the policy community. To pursue this avenue of analysis, we differentiate the shaping power over mode choices of sets of interests often clumped together in the policy community literature as government (or state) actors, namely bureaucrats and politicians.

Sutherland argues in a recent article that:

The way in which government business is organized across departments and nondepartmental organizations represents the combined historical judgements of politicians about how direct a control or leverage they need over particular areas.⁸

Sutherland's concern (like Hodgetts', see Chapter 3) is with what she calls "the 'meta' organizational map" of government.⁹ Canada's pesticide registration system, on the other hand, is wedded to the meso-level of apparatus for administering government programmes and policies. In the latter situation, the lesson from the 1991-92 period of the PRR is that the pattern of organization - or the choice of organizational form - reflects less the judgements of politicians than it does the judgements of bureaucrats about the appropriate leverage of political control.

⁸ Sharon L. Sutherland, "The Public Service and Policy Development," in Michael M. Atkinson, ed. Governing Canada: Institutions and Public Policy (Toronto: Harcourt Brace Jovanovich Canada Inc., 1993), pp. 81-114, at p. 85.

⁹ Ibid., p. 87.

The immediate insiders in the pesticide review's second mode choice were senior and middle management public servants, not politicians. Ministerial involvement was striking in its absence. Besides charging the Working Committee with a vague direction to come up with a government response to the proposed PMRA, ministers - as a collective or individually - failed to stipulate structuring decisions for choosing a mode for regulation (or any other aspect of pesticide regulatory reform). This contrasted with the usual interpretation of government organization by Sutherland and others (see Chapter 3), and also contradicted the popular perception that politicians successfully reclaimed larger roles in policy-making in the Mulroney years, for instance with fortified ministerial offices.¹⁰ Bureaucratic influence in choosing a mode for pesticide regulation is addressed in the context of Section 3.1.2 below.

Finally, it is very difficult to speak of solid mode-related coalitions in the policy community. The next parts of Section 3.1 explain that the 1991-92 stage of the pesticide review was dominated by protracted but informal negotiations between Agriculture Canada, the advisory departments and the Privy Council Office, each of which had its own spin on the mode for registration. The common thread, if there

¹⁰ Selected dimensions of the latter issue are covered by Donald J. Savoie in Thatcher, Reagan, and Mulroney: In Search of a New Bureaucracy (Toronto: University of Toronto Press, 1994). See especially pp. 223-234 on the machinery changes implemented to inject "conservative" considerations into policy- and decision-making, such as the chief of staff post in ministerial offices.

was one, was an abiding faith in regulation by government department, coupled with recognition of the need for fiscally-driven choices.

3.1.2 The Dynamics of Intra-Governmental Bargaining

The 1991-92 period was an inter-departmental choice process. Finding shared ground amongst officials at Agriculture, Health and Welfare, Environment, Fisheries and Oceans, Forestry, and key central agencies was a preliminary requirement for getting Cabinet approval for a reformed pesticide registration system in Canada's parliamentary system of government. The following sections report on the nature of inter-departmental politics.

The distinguishing feature in the mode choice's inter-departmental politics was the existence of serious barriers to productive bargaining that stood in the way of uprooting the registration system. In most cases, it was impossible for officials to envision winning any gains for their departments from the pesticide review, short of making the entire pesticide issue disappear. Moreover, there was no reason for any department to take a leadership role in rallying support for a new agency-based mode for regulation. The incentive was instead to shore up existing positions in the registration system and protect the resources that would likely be sucked away by Treasury Board and PCO to an agency. In short, departments and their officials were

more concerned about the redistributive implications of the available mode options than the quality of collective outcomes.

Nevertheless, the bureaucracy's role as expert in the mode choice made sense from at least one standpoint:

Because of its responsibility for state operations, the bureaucracy has unrivalled knowledge of the detailed organizational framework and capacities of the polity, as well as a unique perspective on the characteristics of various clienteles and policy communities. This knowledge of the administrative setting - and in fact of the society wherever it is administered - makes officials indispensable players in [policy formulation].¹¹

What is unfortunately missing in this genre of explanation is any sense of interaction with the "organizational imprints" or machinery paradigms described by Coleman and Atkinson.¹²

The 1991-92 mode choice followed a two-step path. The first issue, whether to move ahead with creating a Pest Management Regulatory Agency-Minister of Health and Welfare organizational arrangement as suggested by the Review Team, was almost immediately resolved by departments in the negative. The other issue proved considerably more troublesome. The fundamental question driving the 1991-92 mode choice was: What kind of registration system can we afford? As subsequent

¹¹ Sutherland, "The Public Service and Policy Development," p. 85.

¹² Coleman and Atkinson, "Obstacles to Organizational Change".

sections report, choosing a mode for pesticide registration was as much about the problems of scarce resources as it was about making marginal adjustments in structure.

3.1.2.1 Agriculture Canada and the Advisory Departments

The pesticide departments did not stand as a united front on the Review Team's proposed PMRA. They instead adopted strategic lines that reflected assessments of their own - and their minister's own - best interests. The positions and the intensity with which they were advocated varied enormously.

For Health and Welfare bureaucrats, the issue was the proposed reporting relationship between the agency and their department. This was thought to be undesirable because the minister would be held accountable in Parliament for the Agency's activities. There were signs that then-Minister Benoit Bouchard was open to considering the possibility. However, departmental officials judged that regulating pesticides would create a political problem, violating - or appearing to violate - the legal mandate for food safety and health. They therefore applied heavy pressure on Bouchard to push the alternative of an inter-departmental mode with his Cabinet colleagues.

The mode for pesticide registration was a relatively low priority for Environment Canada. It was not an issue on which departmental management was prepared to spend a lot of its limited currency in the inter-departmental arena. DOE's clients thought differently. Groups from the Canadian Environmental Network lobbied Environment officials and the minister to oppose the PMRA concept and press instead for an improved department-based system anchored in statute. This was the same line as had been adopted by the environmental sector on the Review Team in 1989-90.

Bureaucrats, on the whole, agreed on the importance of resolving the mode for regulation. This was because they feared a repeat of the mid 1980s alachlor debacle, which had exploded the policy community and coincidentally severely constrained government's ability to control and lead the pesticide registration issue (see Chapters 4 and 5). As already noted in Chapter 5, the Working Committee's consensus-seeking process was therefore generally collegial and conducted in good faith.

3.1.2.2 The PCO Role

If one player is predicted in the classic interpretation of government (re)organization to be pivotal to mode outcomes, it is the Privy Council Office.¹³ Administrative experts at PCO are positioned in the machinery of government process to expound the norms of parliamentary government. The tools of their trade are abstract principles such as political accountability and responsibility, as well as the prerogative powers of ministers and prime ministers. PCO also serves as the influential gatekeeper to Cabinet policy- and decision-making. Access to the Cabinet table on mode-related and other issues is rationed in the inter-departmental arena in little studied, mysterious ways:

by a process of dramatized worrying about the political and administrative sacred cows that can derail a proposal [...] carefully nondirective questions [and] facial expressions [...] which typically suggest great regret and sadness.¹⁴

Yet PCO's place for most of the 1991-92 mode choice was on the periphery of the policy community. Both the administrative experts and the gatekeepers

¹³ The most helpful article for understanding the various roles of the Privy Council Office is arguably Richard D. French, "The Privy Council Office: Support for Cabinet Decision Making," in Richard Schultz, Orest M. Kruhlak and John C. Terry, The Canadian Political Process, 3rd ed. (Toronto: Holt, Rinehart and Winston, 1979), pp. 363-394. See also J.R. Mallory's classic piece, "The Two Clerks: Parliamentary Discussion of the Role of the Privy Council Office," CJPS, 10:1 (1977), pp. 3-19.

¹⁴ Sutherland, "The Public Service and Policy Development," p. 91.

participated irregularly and selectively in the inter-departmental debate on the Review Team's PMRA recommendation. This often caused their cohorts in other branches of government to think PCO was "suffering from a mild case of schizophrenia".¹⁵

In other respects too the PCO role in 1991-92 catches the conventional theory off guard, particularly as it concerns administrative expertise in designing government machinery. It has been said that:

[...] the organizational experts within government who are called upon to advise on organizational structure, inevitably argue[] for the departmental form of organization. This is their starting point. They argue that because of the convention of ministerial responsibility, anything that in any way detracts from ministerial authority over the organizational entity to be created is bad in principle.¹⁶

In this small regard, at least, the pesticide review confirmed existing knowledge. The PCO approach to the mode issue in 1991-92 simply presumed the benefits of a department-based registration system. This had the effect of reinforcing a pre-emptive strike by most of the other departments to artificially limit the mode options for the pesticide area.

¹⁵ The same sentiment was expressed in several confidential interviews.

¹⁶ A senior Government of Canada official commenting on the creation of the Canadian Space Agency, cited in Coleman and Atkinson, "Obstacles to Organizational Change", p. 147.

But the key implication from the pesticide review is that PCO administrative experts are neither the exclusive nor necessarily the predominant repositories for the norms of organizational design in Canada's parliamentary regime. On the contrary, these norms - and therefore the constraints on mode choices - are deeply entrenched across the senior levels of the bureaucracy, and across departments. The narrowing of mode options is both a more powerful and more complicated, insidious process of diffusion than the literature suggests. This important theme is revisited in Section 3.2's discussion of mode paradigms.

To conclude, PCO's role in the 1991-92 mode choice begs material questions about the nature of expertise necessary to design effective machinery for government regulation. It also puts in question whether such expertise has been available to or been allowed to be exercised in the relevant secretariat of the PCO. Who are the experts? What contribution do they make to "smarter" choices about modes for regulation? Chapter 8 returns to these themes.

3.1.3 The Minister of Agriculture and the Farm Sector: Reactivating Clientele Politics

The classic clientele relationship between federal ministers of agriculture and the farm sector was reactivated in 1991-92. This was a key development for the

mode choice because, despite their apparent willingness to log-roll and trade-off reforms with other stakeholders on the Review Team, agricultural and horticultural interests were not, at bottom, prepared to see the registration system stolen away from "their" minister, with all the attendant negative implications for access to essential inputs. Farm interests thought - and acted as if - they "had God on their side" throughout the pesticide review.¹⁷ The return to old-style politics at this time showed that they still counted on a direct line to the minister's office as back-up protection against a potentially threatening and therefore unwanted mode for regulation.

Clientele politics was increasingly possible after May 1991, with another ministerial shuffle. Bill McKnight, the latest Minister of Agriculture, was freer than his predecessor to resume the traditional advocacy role for farmers. His position in relation to pesticide reform was not constrained by a previous commitment to oversee an arm's-length review as was Mazankowski's. Furthermore, McKnight came to the Agriculture portfolio wanting to show Canadian farmers that, in the turbulent economy of the 1990s, their interests would once again be effectively advanced and protected in federal agricultural policy-making.

¹⁷ Confidential interview. The same theme came across in discussions with several sources, from a cross-section of the policy community.

It has been suggested that McKnight's overall conception of his role as Minister of Agriculture trickled down to how he viewed his responsibilities for the registration system.¹⁸ Unlike Mazankowski, McKnight apparently outright refused to countenance giving up his duties as registrar of pesticides. This was probably because he believed that the health, safety and environmental risks of pesticide use were already being adequately taken into account under the extant administrative agreements with the core departments. His prime job, McKnight maintained, was to ensure the registration system did not in any way underestimate the benefit side of the equation.

Yet to leave the impression of monolithic clientele politics is misleading. Fractures had begun to appear in the agricultural community within a few weeks of Mazankowski receiving the Review Team's final report. This splintering of consensus followed the pattern of major cleavages lately erupting in the farm sector over issues such as trade and farm financing, and between commodity groups.¹⁹

¹⁸ The arguments in this paragraph are based on confidential discussions with several senior government officials.

¹⁹ See Wilson, Farming the System, for a general description of the fragmentation of federal farm policy-making. Coleman stresses that fragmentation extends to the structure of group interests (not just policy itself), arguing that single commodity groups supplanted the Canadian Federation of Agriculture in the 1980s as the most valued farm adviser to the federal government. See Coleman, Business and Politics, Chapter 6.

The first farm groups to formally break rank on the proposed Pest Management Regulatory Agency were AGCare and the Ontario Corn Producers' Association. At a press conference in mid January 1991, they pledged to "take action" to make sure that registration stayed firmly within the Minister of Agriculture's exclusive domain: "They're [Agriculture officials] the only ones who understand that our livelihoods are on the line."²⁰ The Review Team's plan for an independent agency, on the other hand, would give the eco-health lobby the upperhand in registration.

The remnants of a sensitive political issue lurked a little farther below the surface. The Tories had sold free trade to Canadian farmers with a promise that they would have competitive access to pesticides and other inputs. For the members of small commodity groups like AGCare and the OCPA, the recommendations in the Review Team report, including the Pest Management Regulatory Agency, did not go nearly far enough towards reaching this goal.²¹

The Canadian Federation of Agriculture - which had had a seat on the Review Team - was, to no-one's surprise, less antagonistic towards the idea of an agency-based mode for regulation. There were reservations: "If the regulatory agency is

²⁰ A senior AGCare official, cited in Tom Button, "Report Gets Mixed Reviews".

²¹ The position is elaborated in "Report of the Pesticide Review Team: AGCare Position," Ontario Corn Producer, 1991 special issue.

going to report to the health minister, it is paramount that it be truly independent of the department."²² However, the CFA's former Review Team representative warned that by continuing to push the access/international competitiveness theme there was a danger of "carrying the debate in a direction Mr. Mazankowski and his colleagues are most aware of". This was presumably a reference to the end of supply management. The point was also made that the farm sector as a whole had to recognize that a PMRA-like arrangement was a compromise and appropriate safeguards had been negotiated for producers. Bailing out on the mode recommendation would unnecessarily upset the Team's delicately crafted consensus, with serious consequences for the kind of reform implemented by the government.

3.1.4 The Non-Governmental Policy Community and Departmental Interests

As explained above, the policy community was restructured in 1991-92. While bureaucrats (and, to a lesser extent, ministers) took over the influential core, the old members and managers of the Review Team were increasingly outsiders in choosing the mode for regulation. Their status was reinforced by the PMWC's insistence on a relatively closed response stage for the pesticide review.

²² Andreas Dolberg, a senior official at the CFA, cited in "Report Stirs Up Mixed Feelings," Canadian Press, January 3, 1991.

The non-governmental portion of the policy community continued to be very poorly organized in the 1991-92 period. Pesticide interests had only jelled into a very loose community as of the mid 1980s (see Chapters 4 and 5). Individually, several of the sectors with stakes in pesticide regulation - such as the farm and industry sectors - were highly organized and had a long history of policy effectiveness. As a whole, however, the pesticide policy community was still immature in 1991-92. It was therefore unable to mobilize and channel outside group support for the Review Team's proposed Pest Management Regulatory Agency.

There were significant consequences for the federal government's mode choice. A more mature network of inter-group relations might have grounded a pro-agency coalition sufficiently strong to counter bureaucratic interests. Equally important, the policy community's lack of collective skills and experience navigating the federal regulatory arena gave farm interests room to use clientele politics, described in Section 3.1.3, to tip the balance in favour of the status quo.

3.2 Mode Paradigms

The purpose of this section is to explore developments related to the ideas and beliefs underpinning the 1991-92 mode choice. As before, the analysis pays attention

to the macro plane of the intra-governmental choice process, as well as the micro plane of specific members of the policy community.

There was considerably less variety in the sets of ideas and beliefs about the desirable mode for regulation in this stage of the pesticide review. Mode paradigms were mainly differentiated by insiders in terms of how the dominant Westminster-inspired perspective was interpreted to apply to or affect departmental and ministerial interests. The intractability of the structural aspect of modes for regulation was a cornerstone in the dominant "empirical picture". Moreover, many bureaucrats - and their ministers - argued that resources could substitute for the structural reforms demanded by the wider policy community.

3.2.1 The Inter-Departmental Mode Paradigm

The range of acceptable outcomes narrowed very quickly in the inter-departmental arena under the twin influences of dominant organizational mythologies and interest politics. Ultimately, the federal government did not have a plethora of options from which to choose a mode for pesticide registration. Maintaining the status quo was unacceptable to most stakeholders (as later reported in the PMWC's memorandum to Cabinet). Agriculture bureaucrats - from whom regulatory power would have to be torn away - flatly rejected an agency-based registration system with

any connection to Health and Welfare. That left, practically speaking, two alternatives: a tri-ministerial/departmental arrangement involving Agriculture, Health and Welfare and Environment, and an independent pesticide registration agency reporting to the Minister of Agriculture.

Two factors lay behind this pared down choice. The 1991-92 intra-governmental process featured almost blind acceptance of and adherence to the normative standards of organizational design in parliamentary regimes. There was an abiding faith in the pesticide bureaucracy to department-based delivery systems for regulation. What was surprising, given past scholarly explanations of government (re)organization, was the pervasiveness of the dominant paradigm at senior levels of the bureaucracy, and also across departments. The classic commitment - both normatively and in practice - to regulating by minister and department was infused into the choice process from multiple vantage points inside government.

The concept of a mode for regulation with power formally shared amongst several ministers raised eyebrows. However, the PMWC and other pesticide officials recognized that the benefits desired from an arrangement that offended the theory of parliamentary government could probably largely be achieved using an alternative route. The obvious one, consistent with the legendary principle of incremental change, was a single-minister arrangement that incorporated a series of non-statutory work-sharing agreements with other relevant ministers and departments.

Juxtaposed on the other side of the choice process was an interesting melange of ideas and beliefs that repudiated any kind of agency-based arrangement for pesticide registration. A number of officials in the inter-departmental discussions focussed on past regulatory practice. Their (erroneous) view was that there was no precedent in Canada for using agency regulation in an area of public health and safety and, therefore, that the agency option proposed by the Review Team should be thrown out without hesitation.

The second consideration related closely to the bureaucracy's role as ministerial advisor. The Ministers of Agriculture, Health and Welfare and Environment as a group clearly hoped that pesticide controversies would miraculously disappear. The reality, on the other hand, was that public demands for political accountability for pesticide registration (and, equally, other aspects of pesticide regulation) were bound to continue indefinitely. Further, no one in the triad - however loosely connected to the pesticide file - was likely to escape the standard ministerial functions of answering for and publicly legitimizing federal policy- and decision-making in the area.²³ This showed the impossibility of the Review Team's idea of a distanced ministerial neutrality.

²³ These are two of the essential ministerial functions identified by Andrew F. Johnson in "A Minister as an Agent of Policy Change: The Case of Unemployment Insurance in the Seventies," CPA, 24:4 (winter 1981), pp. 612-633.

The advice to ministers was straightforward. If they were going to be held responsible in the public's eye, prudence called for having a direct hand that would enable them to maximize leverage over regulatory decision-making. From that point of view, an arm's-length relationship with the regulator did not make sense. This thinking, combined with the value assigned to precedent, cemented the dominant mode paradigm in 1991-92.

The other major development, besides an abbreviated range of mode options, was the quiet but fundamental adjustment that took place in the substantive components of the inter-departmental mode paradigm. The fiscal reality of governing in the 1990s overshadowed the structural elements in the mode for regulation, and this coloured the parameters of settling on an organizational arrangement for the registration system.

The deeply embedded commitment amongst bureaucrats to department-based organizational arrangements has already been established. The wide range of sources from which this norm assaulted the process of choosing a mode for regulation assured the relative intractability of structure in the mode choice. Resources were also constrained in 1991-92, but seemed to be more flexible in the inter-departmental mode paradigm. Tinkering with the resource lever was viewed, in effect, as a reasonable substitute for the overhaul in structure demanded by the policy community. The bottom line that united departments in this attitude was the realization that the federal

government was poised to lose the last remnants of its capacity to regulate effectively in the pesticide area.

The crucial question in the Review Team's perspective on the mode for regulation had been settling on who should register pesticides. For the Pest Management Working Committee and others in the 1991-92 inter-departmental process, resources took over centre stage in the mode paradigm. The search was for an organizational arrangement that satisfied stakeholders' demands for reform, yet was also affordable - and practical, given that existing regulatory departments stood to win and lose in any redistribution of resources.

But the place of resources in the inter-departmental mode paradigm was, on the whole, highly problematic. The main criterion for the PMWC in advising Cabinet on the mode for regulation was cost: what kind of registration system could Canada's pocketbook afford? The fiscal reality also impinged on the inter-departmental mode paradigm because of its tie to the partisan political priority of reining in the state.

The revenue side of the equation, on the other hand, was completely ignored in the perspective from which departments assessed the mode options. The Review Team had seriously considered the possibility of cost recovery (see Chapter 6). This approach to reducing the costs of regulation was not as yet a standard operating

principle in the belief system through which the bureaucratic portion of the policy community interpreted the mode for regulation.

For another thing, contending theories of causality underlay the inter-departmental mode paradigm of 1991-92. Bureaucrats at the core departments offered different interpretations of the connection between resources and regulatory failure. This led, in turn, to different conclusions about whether additional money and personnel could bring about improvements in pesticide registration. The muddled cause-effect relationships reflected both a basic factual problem, as well as an identification problem. At the same time, they fuelled tensions amongst the departments likely to be affected by the resource implications of any mode reform - and who acted strategically based on their lack of indifference to the range of possible scenarios.

Finally, a brief comment is necessary regarding the important procedural dimensions in the departments' perspective on the mode for regulation. Boundary rules appeared to be less contentious than they had been in 1989-90. This was a misleading consequence of the private sector component of the policy community being formally excluded from the choice process. In reality, and as discussed at length in Chapter 6, the second steadfast pillar in the inter-departmental mode paradigm was a presumption against non-government participation in choosing the mode for regulation.

3.2.2 Mode Paradigms in the Inter-Departmental Arena: Agriculture Canada

Paradigms of modes for regulation are built upon principles about the preferred way to divide regulatory authority in the state, and between public and private interests. The Review Team's Pest Management Regulatory Agency implied redrawing both axes. For one member of the policy community, the Department of Agriculture, the implications were particularly significant as it stood not only to lose immediate responsibility for registration decision-making, but also to be kept on the periphery of power in the proposed new mode for regulation. The possibility of such a major shift in status, however remote, required officials on the Pest Management Working Committee and elsewhere at Agriculture to try to revamp parts of the Department's mode paradigm.

A key dilemma was how to rationalize the Minister of Agriculture's diminished stature in an agency-based registration system. What benefits might accrue to the Department, and to its clients in the Review Team's scenario? It was doubtful, at best, that the classic Agriculture-farm sector relationship could easily dictate the politics of registration; on the contrary, for many members of the policy community, uncapturing the registration system from these interests was the main motivation for mode reform (see Chapters 4 and 5). The answer was to reframe Agriculture's role in pesticide registration.

The need to reframe had been anticipated earlier. One commentator on the Review Team's mode recommendation observed that: "Once Agriculture Canada gives up its lead role [in pesticide registration], it will be liberated to become far more aggressive on behalf of farmers."²⁴ Two areas, pesticide research and a minor use programme, had been singled out. Leblond made much the same point when he resumed his post as Associate Deputy Minister. At a federal-provincial meeting of agriculture deputies in January 1991, he explained that:

the role of Agriculture Canada can be far more proactive in promoting pest control product uses [with an agency] as it will not longer be responsible for their regulatory status.

The concept of Agriculture as an even more proactive voice for farm interests in federal agricultural policy was a theme developed in detail under the Pest Management Working Committee in the early months of 1991. Documents reveal that "allow[ing] Agriculture to play a much stronger role in promoting policies and strategies that assist farm groups" - including a minor use label expansion and registrations policy, a price monitoring programme, and support for critical need applications - was one of three major advantages predicted to accrue to the Department and its clients from an agency. The idea was short-lived. Under the heavy weight of the status quo and entrenched mode paradigms at Agriculture, resistance was fast and furious. The bottom line was that, in Agriculture's thinking

²⁴ Romahn, "Pesticides Report Deserves Award".

about the mode for regulation, nothing added up to due compensation for losing authority over pesticides.

3.3 The Decision Style

This section examines the decision style underlying the federal government's decision to adopt a revised department-based arrangement for pesticide registration. At the macro level, the rules and practices governing decision-making in the 1991-92 period approximated most closely, but far from perfectly, what Chapter 3 termed a conventional pattern of regulatory reform. Departments and central agencies were not positioned in the policy community to formally bargain or negotiate a settlement on the machinery for regulation as the Review Team had been. In addition, the PMWC guided the intra-governmental process in the direction of separating policy from administrative factors. Another important development in 1991-92 concerned the extent to which the mode choice weaved its way into the broader regulatory and political fabric of government under the influence of the decision style.

3.3.1 The Macro Approach: A Proxy for Conventional Regulatory Reform(?)

The decision style in 1991-92 marked a stark contrast with the rules and practices governing how the Review Team had approached the mode for regulation. For one thing, from a constitutional perspective, bureaucrats at the core of the policy community - on the Pest Management Working Committee, elsewhere at Agriculture, in the advisory departments and at PCO and other central agencies - lacked authority to formally bargain on the mode for regulation in the sense of reaching a final decision backed up by the coercive power of the state. These officials were agents in the intra-governmental process for their ministers, entitled to express views and tender advice. The ultimate choice about the mode for regulation, however, rested with the political level of government.

To use the terminology in Chapter 3's theoretical framework, the 1991-92 decision style was characterized by the absence of a formal negotiation dynamic. Bargaining and log-rolling admittedly took place amongst departments and agencies with a view to building consensus. Compared to the Review Team period, however, there was a different quality about it. The purpose was to pave the way for Cabinet agreement on a revised organizational arrangement for pesticide registration. There was no transfer of decision-making power; ministers always had the right, in constitutional and administrative law, to draw their own conclusions about the preferred mode for regulation.

The other crucial difference compared to the previous period was the decision style's interpretation of viability. The criteria for making a choice about the mode for regulation, noted already in Chapter 5, were workability, affordability and consistency with federal policy. Moreover, the scope of the mode choice as defined by the PMWC covered just the administrative dimensions of the registration system. There were two main concerns in this latter regard, namely the view that there were too many government bodies operating at arm's-length as it was, and anticipated difficulties in staffing qualified toxicologists. Even the inter-departmental assessment of the main mode-related themes in the Review Team's final report suggested a new spin on how an organizational arrangement would be chosen. According to the Working Committee and the departments, a mode would be judged viable if it set priorities (for registration submissions, as well as in terms of responding to ministerial needs), was accountable and coordinated, and produced timely and efficient registration decisions.

Finally, the second mode choice in the PRR amounted to a once-only decision. The approach in the earlier Review Team period (see especially Section 2 in Chapter 6) had been based on the idea of a series of critical decision points over time, and global log-rolling on reform. Here, the mode for regulation was assessed not only independently, but also at the very start of the 1991-92 period. The PMWC had concluded within a few months that an agency was not amongst the serious mode

options. Thereafter, the choice process focussed on identifying variations on a department-based system that met the bureaucrats' viability test described above.

3.3.2 Linking the Mode Choice

Chapter 3 hypothesized that one of the consequences of an intra-governmental decision style is to link the choice of mode for regulation with broader regulatory and political issues. This section analyzes the upward and sideways linkages that occurred in the PRR's 1991-92 period.

3.3.2.1 Upward

The 1991-92 mode choice linked in an upward direction with the federal government's environmental or green agenda. The link was both conceptual and institutional. Conceptually, the umbrella that offered a foothold for making a choice about the mode for pesticide registration was the emerging idea of "environmental

sustainability".²⁵ Insiders wisely thread the idea into their thinking about organizational reform.

The existence and effects of the institutional ties were easier to identify. The first was mostly superficial and coincidental, the fact that the chair of the Review Team was also responsible, as Associate Deputy Minister, for Agriculture Canada's sustainability projects. The more important link was the federal Green Plan.

The Green Plan, "an environmental action plan for Canada", had been announced by Environment Minister Robert de Cotret on behalf of the government of Canada on December 11th, 1990, just over a week before Mazankowski received the Review Team's final report.²⁶ The oft-heralded centrepiece in the Plan was a promise to spend \$3-billion on environmental initiatives over the next five years.²⁷ The Green Plan therefore became the sole pot of major "new" dollars in the federal government in the early 1990s.

²⁵ The concept of sustainable development was pioneered by the 1987 U.N.-sponsored (Brundtland) World Commission on Environment and Development. The Commission's mandate was to study the relationship between economic development and the global environment. Environmentally sustainable activity was defined in the well-known report Our Common Future (Oxford: Oxford University Press, 1987) as "activity in which the environment is fully incorporated into the economic decision-making process as a forethought, not an afterthought."

²⁶ Canada. Canada's Green Plan: Canada's Green Plan for a Healthy Environment (Ottawa: Minister of Supply and Services, 1990).

²⁷ The financial aspects of the Green Plan are outlined in ibid., at pp. 21-22.

Therein lies the upward institutional link for the mode for pesticide registration. Whether the organizational arrangement eventually selected by the government amounted to a Cadillac, a Chevrolet or a Volkswagen bug, it was widely accepted that it would put additional strain on many departmental budgets. Dipping into the Green Plan with a proposal for a mode for regulation that promised to guarantee the environment would be fully incorporated with economic considerations in pesticide decision-making - "as a forethought, not an afterthought" - was about the only way in 1991-92 to lighten the load.

In reality, greening/sustainability was already a large department-wide concern for Agriculture Canada by this time. Pesticides and the pesticide registration system were a small slice of the Department's plan to adjust both its activities and those of the farm sector to take account of the priority lately attached to environmental issues.²⁸ In that sense, there is a risk of misunderstanding cause and effect. The conceptual and institutional linking process between the mode for regulation and the federal government environmental agenda was likely already in motion as of the late 1980s.

²⁸ The federal pesticide registration review was in fact noted in the Green Plan, in the section dealing with Sustaining Our Renewable Resources. Moreover, environmental sustainability was one of four pillars of reform in Agriculture's ambitious 1989-90 Food Policy Review and the ensuing framework of action approved by the Minister in August 1990 (discussed in Section 2.3.2.2).

3.3.2.2 Sideways

While the Green Plan linked the mode choice upward, there were also sideways connections. The main one was with Agriculture's own Agri-Food Policy Review and agricultural sustainability initiatives.

The Agri-Food Policy Review had been launched by the Minister of Agriculture in November 1989 as a basis for devising a new farm policy for the 1990s.²⁹ It subsequently sparked Agriculture's shift to a market-oriented, commodity-based development strategy. For the present purpose, the salient point is that the Review trenched on the pesticide registration terrain. The Task Force on Competitiveness in the Agri-Food Industry, for example, targetted the "cumbersome" registration system as a fundamental cause of the price differential between pesticides in Canada and the U.S., and implied that it should be "expeditiously ended".³⁰ The PRR itself became a topic of discussion for other groups studying food safety and quality, and sustainable agriculture.

²⁹ See Agriculture Canada, Growing Together (Ottawa: Minister of Supply and Services, 1989), which formed the focal point for this extensive policy review.

³⁰ Canada. Task Force on Competitiveness in the Agri-Food Industry. Growing Together: Report to Ministers of Agriculture (Ottawa, 1990), p. 10.

Lastly, and almost inevitably, the 1991-92 mode choice leached into the overall greening process underway at Agriculture.³¹ The term "environmentally sustainable agriculture" had appeared for the first time in official departmental documents in 1988-89. Previously, environmental concerns meant soil and water management. The creation of the post of Associate Deputy Minister for Environment³² anointed a new evolution in the Department's approach to agricultural feasibility, with the focus increasingly on environmental and social dimensions (not just economic) and horizontal coordination.

The major themes of the Food Policy Review and agricultural sustainability defined key parts of the broader context for choosing a mode for pesticide registration in the PRR's second phase. In this, they appended the mixing of structure, resources and processes in a sideways direction to the macro plane of federal policy- and decision-making. The nature of the intra-governmental decision style in 1991-92 guaranteed, in turn, that the themes resonated in the choice calculus of insiders in the policy community.

³¹ There are a number of good references on the greening of Agriculture Canada. See, e.g.: Agriculture Canada. Growing Together; Canada. Parliament. House of Commons. Standing Committee on Agriculture. Path to Sustainable Agriculture (Ottawa, 1992); and Library of Parliament. Research Branch. Sustainable Agriculture: Future Dimensions (Ottawa: Minister of Supply and Services, March 1992). From a theoretical perspective, the best is by far Skogstad, Political Institutions and Sustainable Agriculture.

³² The first appointee was Leblond, the Review Team chair.

4.0 SUMMARY

The 1991-92 phase of the pesticide review culminated in a second verdict on the preferred mode for regulation. The federal government's decision to introduce what were, in effect, marginal adjustments in the extant registration system constituted rejection of the plan by the Review Team for an independent Pest Management Regulatory Agency loosely appended to the Minister of Health and Wealth. The purpose of this chapter was to describe mode choice #2 (in Sections 1.0 and 2.0) and then account for it using the dissertation's three interest politics, mode paradigms and decision style variables (in Section 3.0).

The foremost issue in choosing a mode for pesticide registration in 1991-92 was not structure, as it had been in the previous period, but the resource side of the equation. The basic departmental framework for the registration system was determined very quickly under the dual influence of the dominant organizational imprints (or empirical pictures) and interest politics. As Section 3.0. explained, bureaucratic insiders in the federal government succeeded in reducing the mode choice from the contentious political-administrative issue that it had been under the Review Team to a question of simply getting the machinery of government right. This meant balancing the policy community's demands for reform with the serious constraints on resource tractability in Ottawa in the early 1990s.

Section 3.1 explored the interest politics underpinning the PRR's second mode choice. The main theme in the analysis was the highly fragmented way in which members of the policy community sought to ensure their preferences were reflected in the mix of structure, resources and process settled on for the registration system. Particular attention was paid to the separate shaping power of pesticide bureaucrats and their elected ministers. The section argued that, although it may be reasonable to think of a state-directed policy community, theorizing about modes for regulation can go farther. The interest politics of 1991-92 suggested several routes for a state-dominated choice process to be either strengthened, or partially counteracted.

Section 3.2 turned to the issue of mode paradigms in the policy community. The purpose was to shed necessary light on the substantive and procedural aspects of dominant organizational imprints regarding machinery for government regulation. As the analysis showed, policy actors have different attitudes toward structural reform and the substitutability of elements that together comprise modes for regulation. Special emphasis was again placed on distinguishing mode paradigms in the bureaucratic arena from those hovering at the ministerial level.

Lastly, Section 3.3 examined the decision style variable. The "reg neg" style that had prevailed in 1989-90 was missing in 1991-92. While a certain kind of bargaining did take place at the core of the policy community, it was directed at a very different objective. The absence of a formal negotiation dynamic amongst public

and private interests affected the criteria for selecting amongst candidate organizational arrangements and, hence, the final mode outcome. The other important development in 1991-92, assessed in Section 3.3.2, was the way in which the decision style linked the mode choice both upward and sideways with the macro plane of federal policy- and decision-making.

Chapter 8

CONCLUSION

We are reminded in the introduction to the latest book-length analysis of regulation that the study of regulation often involves asking very basic questions:

What factors shape the method of [government] intervention and determine whether the policy area will be controlled by a central government department, by an independent commission or, as in the case of professional qualifications, by the professional body itself?

As Peele goes on to explain, "Such questions may be deceptively simple to ask; but they are much more complex to answer."¹

A scaled-down version of Peele's sample question is the launching pad for the dissertation's examination of choosing modes for regulation. But, as argued in Chapter 1, the initial priority must be on constructing a satisfactory concept of modes for regulation. Only once that has been accomplished is it possible to properly investigate the determinants of mode choices or, as Peele and James Q. Wilson before her have put it, the factors that shape the choice of organizational arrangement for regulation. Chapter 3's exercise in top-down and bottom-up theory construction and the subsequent case study of the 1988-92 federal pesticide registration review (in Chapters 4 through 7) testify that finding answers is both complex, and challenging.

¹ See Gillian Peele in Francis, The Politics of Regulation, at p. ix.

The dissertation proposed two fundamental hypotheses. The first concerned the concept of modes for regulation. Chapter 3 argued that modes should be viewed as quintessential matters of government organization, or the administrative machinery by which government regulates. The dissertation also broke with the traditional approach in conceptualizing modes for regulation as carefully crafted mixes of three elements - structure, resources (staff and budgets) and processes (for dealing with other political actors with roles in regulation, and for making regulatory decisions) - rather than legally-defined boxes on the meta organizational chart of government. The detailed analysis in the PRR case study showed that the three elements are independent and in some measure substitutable, but not equally tractable.

The dissertation's other major contribution is to use this mode concept, combined with existing literature on regulation, policy communities, policy instruments and government (re)organization, as the building blocks for a theoretical perspective on the choice of mode for regulation. The fundamental hypothesis, again developed and refined in Chapter 3, was that choices about the mode for regulation are the product of interplay over time amongst three variables: interest politics, mode paradigms and decision styles. The resulting theoretical framework constituted the dissertation's lens on the 1989-90 and 1991-92 mode choices in the pesticide registration review.

The dissertation's theoretical perspective on choosing modes for regulation advances the study of regulation in a very significant way. For one thing, it forces us to rethink the basic choice. The dissertation's approach is to directly challenge the conventional premise of a two-way choice between regulation by executive department and regulation by independent regulatory agency. In the conceptualization developed in Part I, modes for regulation are mixes or bundles of structure, resources and processes and these elements, in turn, are both independent and potentially substitutable. This understanding of modes for regulation automatically implies great richness in the options available to political actors who are involved in designing de novo or reforming the machinery for government regulation.

The dissertation is more than justified in its departure from the conventional approach. The dissertation's mode concept passes the basic test that good theorizing must draw on well-defined, reasonable propositions about concepts and variables, and the relationships between them. Tractability was offered (in Chapter 3) as a way to think about how the three mode elements may relate to one another. Furthermore, the evidence from Chapters 6 and 7 is that the notion of bundles of structure, resources and processes in fact conforms very closely with political actors' day-to-day empirical pictures of not only the machinery for delivering regulatory policies and programmes, but also what they think they are engaged in when choosing a mode for regulation. It was apparent in the discussion in Chapters 2 and 3 that past research related to

choosing modes for regulation passes neither the good theory test, nor the crude reality check.

The dissertation also set out in Chapter 1 to build a more satisfactory account of the determinants of mode choices. Here, again, the approach developed in Part I breaks new ground. Chapter 2 showed the pointed inadequacy of single variable explanations of regulatory outcomes. The dissertation's theoretical framework, on the other hand, incorporates three independent variables identified in several distinct yet complementary streams of literature as crucial to the distribution of power over political choices, namely interest politics, ideas and beliefs and rules and procedures for decision-making.

The dissertation's approach to explaining mode choices borrows liberally from the literature on regulation, policy instruments, policy communities and government (re)organization. Borrowing ensures a degree of continuity with the existing state of knowledge. But equally important, the theoretical perspective developed in Chapters 2 and 3 and "tested" in Chapters 4 through 7 refines and revises the original concepts and analytic devices to cast brand new, innovative light on a political choice that has so far escaped the attention it rightly deserves from students of regulation and those interested in reinventing government. The interest politics-mode paradigms-decision style framework confirms the strength selected scholars have seen time and time again in bridge-building and multi-disciplinary perspectives on government regulation.

The main advantage of the dissertation's approach to understanding and explaining mode choices, simply put, is that it both synthesizes and goes beyond existing knowledge. It characterizes the choice of mode for regulation as a fluid, evolutionary, policy community-wide activity in crafting machinery for delivering regulatory policies and programmes out of various possible structures, budgets and staffing levels and administrative processes. This moves the study of regulation away from two unfortunate tendencies: to see regulatory regimes in static and highly legalistic terms; and to see the world of regulation as a series of false dichotomies - business and governments, markets and state intervention, economic and social regulation and, not least of all, regulatory departments and independent agencies.

We acknowledge the shortcomings. The dissertation's theoretical perspective is open to the criticism that its high level of generality produces overly simplistic propositions about how the operation of policy communities contributes to or shapes the choice of mode for regulation. The defense is two-fold: first, that simple questions may be the most telling ones, despite academic reluctance to take them on and, second, that the hypotheses grow naturally out of the state of the literature (see Chapter 2).

Finally, it should be said again that there has been no pretence in the preceding chapters of identifying or speculating about ideal mode choices. The goal has rather been to enrich our basic understanding of:

- . the insider-outsider configuration of policy communities mobilized to settle on a mode for regulation;
- . the effectiveness of information and other resources in shaping mode choices;
- . the qualities various political actors assign to candidate modes, and what they look for in deciding on their preferred organization arrangement; and
- . the implications of different rules and procedures for making choices.

The point, in short, is that students of regulation, regulatory reform and reinventing government - whether of the academic or practitioner bent - can ill-afford to be deceived about the value of such knowledge. Confronting these issues head-on as the dissertation does helps in starting to understand the many daunting dilemmas that presently face the modern regulatory state.

The next step in theory-building can proceed in several ways. On the one hand, there is a need to tighten competing perspectives on mode choices, and then juxtapose them carefully and closely with the dissertation's explanation based on the interaction of interest politics with mode paradigms and decision styles. This establishes a clearer baseline from which to evaluate alternative models of the choice process. Another strategy is to push onward with refining the interest politics-mode paradigms-decision styles framework begun in the dissertation.

As already observed, the main strength of the interest politics-mode paradigms-decision styles perspective is the rich, comprehensive explanation it yields. The literature review in Chapters 2 and 3 concluded that a single variable is insufficient to account for policy communities' choices about modes for regulation. The PRR case study confirmed this. Consequently, the preferable next steps strategy is to take full advantage of the dissertation's multi-variable approach to explanation and analysis. We can polish both individual variables and the overall perspective on choosing modes for regulation by revisiting several of the leading themes in the PRR case study.

1.0 Generalizing from the 1988-92 Pesticide Review

Before proceeding, we must stop to consider the appropriateness of drawing general conclusions about modes for regulation and choosing them based on the 1988-92 pesticide registration review case study. There are good reasons for being cautious. Building cumulative knowledge using the case study method is a perennial sore spot for students of public policy and regulation. The debate² is unlikely to be resolved soon, in either direction.

² Mary Timney Bailey provides an excellent overview of the debate as well as a strong defense of the case study methodology in "Do Physicists Use Case Studies? Thoughts on Public Administration Research," PAR, 52:1 (Jan./Feb. 1992), pp. 47-54.

Arguably the more serious issue is whether the pesticide registration review poses special dilemmas for generalizing about choosing modes for regulation.³ We must ask whether our ability to draw general conclusions from the two mode choices in the PRR is jeopardized, in any way, by the fact that those choices concerned the design of machinery for pesticide registration? Chapter 4 explained the unquestionably political nature of the subject matter of regulation (i.e. pesticides). Further, the dissertation's theoretical perspective presumed that macro context - the history of pesticide regulation/registration in Canada, proliferation and the inherent bone and bane characteristics of pesticides, for example - artfully infuses itself into mode choices. It seems reasonable to think, therefore, that the baggage associated with pesticide registration impacts on the organizational arrangement selected for regulation. For one thing, given the controversies rampant in the pesticide policy community in Canada, the cards may be heavily weighted in favour of tight ministerial control, with the logical consequence being a department-centered mode for regulation.

The reasonable conclusion in general may be that a stronger dose of ministerial or political involvement should be expected in mode choices when there are deep, contentious cleavages in the policy community. In those circumstances, mode choices

³ The problem discussed in the next two paragraphs came up in several confidential interviews conducted for the dissertation. I thank the interviewees for their pointed observations and comments.

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may be decided primarily by partisan political considerations as opposed to administrative criteria. This is but one of several important hypotheses suggested by the PRR case study which is ripe for testing against a larger body of empirical evidence.

2.0 The Concept of Choice: Choice #1 and Choice #2

What we mean - and do not mean - by "choosing" a mode for regulation must be clarified. The 1988-92 pesticide review makes emphatically clear that it is inappropriate to think in terms of a deliberate, intended, once-and-for-all choice of a mode for pesticide registration by a single decision-maker. To borrow from a highly respected source, mode choices, like policy choices, are instead "many streams of decisions and interactions that cumulate into processes of choice."⁴

Theories of regulation and public policy often come under attack for being imprecise about dependent variables.⁵ What are we attempting to explain? In the dissertation's explanatory framework, a mode for regulation is a bundle of structure,

⁴ Arnold J. Heidenheimer, Hugh Heclo and Carolyn Teich Adams. Comparative Public Policy: The Politics of Social Choice in America, Europe, and Japan, 3rd ed. (New York: St. Martin's Press, 1990), p. 12.

⁵ Recall, for instance, the theoretical problems posed by so-called "non-decisions". See Peter Bachrach and Morton S. Baratz, "Decisions and Nondecisions: An Analytical Framework," APSR, 57 (1963), pp. 632-642.

resources and processes. How do we know, then, when a mode is chosen? Explicit decisions are rarely made in policy communities about what policy, what instrument or what organizational arrangement. From that point of view, the mode choices in the pesticide review are arguably far more obvious than most. There are outcomes that a reasonable person could point to as representing the coming together or congealing of interest politics, mode paradigms and decision styles into expressed preferences about the mode for pesticide registration. This is not to imply that the mode choices in the pesticide review are qualitatively identical. The point is only that there are two.

3.0 Explaining Mode Choices: Interest Politics, Mode Paradigms and Decision Styles

3.1 A State-Directed Policy Community for Mode Choices?

Chapter 3 tentatively posed the question of moving beyond the concept of insiders and outsiders to the notion of a state-directed policy community for mode choices. The proposition has two parts: first, that it is more meaningful in terms of explaining mode outcomes to think about a policy community for government (re)organization than a policy community for pesticide registration; and, second, that the process of designing modes for regulation roughly matches Coleman and Skogstad's model of a policy community where the state has a high degree of

autonomy in relation to societal actors and there is a low level of organizational development amongst non-state interests. Recasting the policy community concept has precedent.⁶ The issue, here, is whether it adds to understanding about choosing modes for regulation.

One reason for pursuing this line of theoretical development is recent work by Coleman and Atkinson on Canada's Space Agency (CSA) and mentioned briefly in earlier chapters. Coleman and Atkinson claim that the policy setting of the space sector was a central factor in the type of organizational form adopted for the CSA: "the institutional legacy of a state-directed network could simply not be overcome."⁷ The end result was that "a proposed organizational innovation gradually succumbed to the established organizational imprints derived from the Westminster model of parliamentary government."⁸ Coleman and Atkinson's approach to analyzing what is, in effect, an example of choosing an organizational arrangement (for public administration) assumes that the relevant domain is space policy.

It may be the case, however, that the relevant field is organizational design in general or, put slightly differently, that the process of choosing modes for regulation and other aspects of public administration is not policy field specific. Neither space

⁶ See the discussion of Sabatier's and Hoberg's work in Chapter 3.

⁷ Coleman and Atkinson, "Obstacles to Organizational Change," p. 149.

⁸ *Ibid.*, p. 131.

(for the CSA) nor pesticide registration (for the PRR) is really important. What does matter is that policy communities are choosing modes or organizational arrangements for programme and policy delivery.

Coleman and Atkinson provide preliminary clues about what to expect in a state-directed policy community for choosing modes for regulation. Organizational options would be judged against the internal bureaucratic and political requirements of the state, "without much concern expressed for the needs of the clientele."⁹

Moreover:

State officials [would] assume, usually correctly, that the industry has little or no appreciation of the political and bureaucratic realities associated with organizational change. Firms are not considered strong enough to offer policy advice; paternalism begets clients, not partners.¹⁰

Non-governmental interests might be able to force mode reform on to the agenda; they would be "unable to make a significant contribution to the transition,"¹¹ however, because of constraints imposed by institutional variables (e.g. the nature of state-society relations, high bargaining costs and organizational mythologies).

The policy community in the pesticide review did not, on the whole, conform to this model. The contrast between Coleman and Atkinson's Space Agency case and

⁹ Ibid., p. 149.

¹⁰ Ibid., pp. 149-150.

¹¹ Ibid., p. 149.

Chapter 6's description and analysis of the 1989-90 mode choice in the pesticide review is particularly pronounced. Nevertheless, the dissertation's methodology of distinguishing two mode choices - and hence two time periods - may mask a consistent pattern of inter-interest relations when machinery is under design for government regulation.

There are several grounds for pursuing this hypothesis elsewhere. The concept of a state-directed policy community for government (re)organization is consistent with - but also extends - analysis in the tradition of executive preeminence and parliamentary norms. The principal contribution would be to shift the centre of inquiry to the relative shaping capacity of public and private sector actors. As the PRR case study reveals, both sides of the public-private and insider-outsider divides, wherever they are momentarily drawn, have something important to offer in the pursuit of reinvented modes for regulation. Furthermore, using a revised concept of policy community to drive the cumulation of theoretical and empirical knowledge about mode choices is conducive to comparative research across time, across jurisdictions, and also across substantive policy fields.

3.2 Expertise and Knowledge in Mode Choices

A major theme in the dissertation was the capacity of expertise and knowledge to influence the policy community's choice about the preferred mode for regulation. The PRR case study showed that types of expertise and knowledge are not made equal, and their respective value is not necessarily uniform across policy settings. Analysis of the 1989-90 and 1991-92 mode choices also revealed that expertise and knowledge derive their influence largely through the linking of interest politics and mode paradigms.

Chapters 6 and 7 unexpectedly captured a regulatory version of two solitudes. The dividing line was between the bureaucratic and private sector components of the policy community. Not only did they see and speak about modes for regulation in completely different terms, the lack of meaningful dialogue and mutual understanding between the camps sometimes erupted into counter-productive battles of will over whose preferences and paradigms would be expressed in the organizational arrangement settled on for the registration system.

Putting the question of blame aside, the central issue relates to the nature of expertise necessary to design smarter modes for regulation and, most important, where we find it. Chapter 7 argued that officials at the Privy Council Office with a mandate in the machinery of government area played a very marginal role in the PRR.

On the other hand, the organizational imprints of parliamentary-style government were found to prevail at senior levels across the pesticide departments, in 1989-90 and 1991-92. At first blush, then, administrative expertise is widely diffused.

That said, the case study chapters also reported a remarkable narrowing of the mode choice, especially when it came to options beyond the single minister-based norm.

What sense can we make of this? We can accept the overwhelming power and influence of the minister- and department-centered organizational mythology, and learn from the PRR case study and similar instances of reforming modes for regulation about the conditions that must be met if the normative forces are to be counteracted (for example, that political will alone is not sufficient). It is undoubtedly more realistic to focus energy on easing the grip the dominant mode paradigm has on the process of designing modes for regulation, rather than to worry about fully counteracting it. Even this small adjustment, however, would help to ensure other organizational tools are given a reasonable hearing and assessment in policy communities involved in choosing a mode for regulation.

There is nothing intrinsically inferior about the Westminster-inspired mode for regulation. By most accounts, it has admirably stood the test of time. But a danger exists just the same. The dissertation's case study of the pesticide review suggests that the bureaucratic components of policy communities operate according to a "principle of caution", where the standard of proof - borne by the proponents of

change - is the criminal law standard of beyond a reasonable doubt. Add deeply embedded commitments to regulation by minister/department and the prospect of a state-directed policy community, and the inescapable result may be de minimus mode choices. These are mixes of structure, resources and processes that involve the least amount of disruption and change, but undermine the capacity of governments to regulate - and govern - smarter.

3.3 A Final Word

The (re)moulding of Canada's pesticide registration system was still unfinished in the fall of 1994. Developments since the government's announcement of a revised pesticide registration system, over two years earlier, confirmed that we have only begun to understand the politics of choosing modes for regulation. The post-1992 period creates a valuable touchstone for the dissertation's theoretical perspective. Even better, it may be possible to use the post-1992 period as a third mode choice and thereby continue to build theoretical and empirical knowledge about mode choices in a comparative way.¹²

¹² Some of the most interesting questions suggested by events post-1992 relate to: the rising interest in previously unheard of structural options such as special operating agencies; the impact of mode reforms in other jurisdictions; changed priorities for choosing between modes in both the government/bureaucratic and private sector portions of the policy community (e.g. the declining importance of environmental issues and stakeholders when fiscal considerations become paramount); and the implications of personnel shuffles in the bureaucracy and at the ministerial level.

Appendix A

PROFILES OF THE ORGANIZATIONS REPRESENTED ON THE PESTICIDE REGISTRATION REVIEW TEAM

The Crop Protection Advisory Committee

The Crop Protection Advisory Committee (CPAC) is a joint committee of the Canadian Federation of Agriculture (CFA) and the Canadian Horticultural Council (CHC). The CFA is the national umbrella organization for the general farm sector in Canada, drawing its membership from provincial farm and commodity groups. The organization was formed in 1935 "to answer the need for one unified voice to speak on behalf of Canadian farmers." The CHC performs an analogous coordinating role for producer organizations in the horticultural sector (e.g. fruit and vegetables, floriculture and nursery trades). Founded in 1922, the CHC is also one of the CFA's member organizations.

The CFA and the CHC established their eight-member Crop Protection Advisory Committee in the mid 1980s. The Committee facilitates product registration, studies and develops policies on crop protection issues and lobbies government. CPAC called for a major overhaul of the federal pesticide registration system following the deregistration of alachlor (examined at length in Chapter 4).

CPAC was invited to nominate two delegates to the Pesticide Registration Review Team. Both of the nominees sat on CPAC, one as its chair. CPAC as a whole served as the agricultural sector's main caucus for the pesticide review, although a small group of producers also took on important coordinating responsibilities.

The Crop Protection Institute of Canada

The Crop Protection Institute of Canada (CPIC) was founded in 1952 as the Canadian Agricultural Chemicals Association. The goal of the organization is "to promote the development of the crop protection chemicals industry in Canada". CPIC currently represents approximately 40 member firms, all of them manufacturers and/or distributors of agricultural chemicals.

The Institute set up a Regulatory Reform Committee in anticipation of a federal government review of the pesticide registration system. The Committee's main responsibility was to develop an official industry position on pesticide regulatory reform. The Committee subsequently served as the caucus for CPIC's two members on the Review Team. In this latter role, the Committee identified the issues of major concern to pesticide manufacturers/distributors, studied policy options, analyzed the

trade-offs necessary for intra- and inter-party agreement in the review process and advised the industry's Review Team members on negotiating strategy. The Regulatory Reform Committee reported directly to CPIC's board of directors; it also constituted the basic accountability link between the board and CPIC's Review Team members.

CPIC's Technical Committee played a supporting role in the pesticide review. Its members, people who worked with the registration system on a day-to-day basis, prepared technical briefs for the Regulatory Reform Committee and, through it, the Institute's Review Team representatives.

The Canadian Medical Association and the Canadian Public Health Association

Founded in 1867, the Canadian Medical Association (CMA) is the umbrella organization for provincial and territorial medical associations. It indirectly represents approximately 46,000 medical professionals. The CMA advances the interests of its members in the public policy arena, and also strives to promote ethics and standards of medical practice as well as high quality health and health care for Canadians.

Pesticide regulation was one of four major issues under study by the CMA's Sub-Committee on Environmental and Occupational Health (SCEOH) in the late 1980s. SCEOH's members, all physicians, were increasingly concerned about occupational exposure for workers, food residues, groundwater contamination and the effects of pesticides for reproductive health.

The Canadian Public Health Association (CPHA) was established in 1910. The organization speaks for a wide range of health disciplines and other groups and individuals in the area of personal and community health policy. All told, the CPHA has 2,500 individual members.

The CMA and the CPHA jointly nominated one member to the Review Team. This person sat as a member on the CMA's SCEOH Committee. The health sector did not have a formal caucus for the pesticide review. The closest thing was SCEOH, which generally monitored review developments on behalf of the CMA.

The Canadian Environmental Network

The Canadian Environmental Network (CEN) is a loose coalition of about 1,000 groups from across the country concerned with conservation and protection of the environment. CEN was established in 1977. Lacking any formal organization itself, the Network's primary function is to act as a central coordinator for the highly

diverse environmental movement. CEN provides a forum for groups to share their knowledge and expertise. Small caucuses form around specific environmental issues such as pesticides.

CEN's Standing Pesticide Caucus was one the Network's first attempts at direct participation in the federal policy process. The Caucus held a vote to select CEN's two representatives on the Review Team. A sub-set of the Standing Pesticide Caucus, about a dozen people from 15 organizations, formed a special Pesticide Registration Review Caucus. This latter group met bi-monthly in 1989 and 1990 to develop consensus positions on pesticide regulatory reform which were, in turn, advanced by CEN's Review Team members.

The Canadian Manufacturers of Chemical Specialties

The Canadian Manufacturers of Chemical Specialties (CMCS) was set up in 1958 to provide a national voice for the chemical specialty manufacturing industry in Canada. CMCS' 100 members are mainly companies involved in manufacturing, processing, packaging and distributing chemical specialty products, such as waxes and polishes, antimicrobial chemicals, detergents and water treatment chemicals and household pesticides. A much smaller number of CMCS' members are firms that supply equipment and materials for the industry. There has historically been a very close working relationship between CMCS and the Crop Protection Institute of Canada. In recent years, however, CMCS has increasingly tried to differentiate itself and "go it alone" in the policy process.

CMCS appointed one member to the Review Team. This member received limited support from the organization's Pest Control Products Division.

The Consumers' Association of Canada

The Consumers' Association of Canada (CAC) was founded in 1947 as "a voluntary, non-profit and non-governmental organization representing consumers across Canada." The CAC's purpose is four-fold:

- . to unite the strength of consumers to improve the standards of living in Canadian homes;
- . to study consumer problems and make recommendations for their solution;
- . to bring the views of consumers to the attention of government, trade and industry and to provide a channel

from these to the consumer; and

- to obtain and provide from consumers information and counsel on consumer goods and services and to conduct research and tests for the better accomplishments of the objects of the Association.

The CAC appointed one person to the Review Team. The CAC's Review Team member and the chairs of three CAC national committees (on Food, Environment and Health) together headed the organization's special pesticide registration review caucus. This caucus had about 40 members from across the country and met regularly. A project officer at CAC headquarters in Ottawa coordinated the caucus' research and policy development activities.

The Canadian Labour Congress

The Canadian Labour Congress (CLC) is the largest central labour organization in Canada. Established in 1956, the organization has 84 institutional members and 2,200,000 associate members. The CLC strives to advance the economic and social welfare of Canadian workers.

The CLC nominated the president of the Canadian Farmworkers' Union to sit on the Review Team. The CAC also created a nine-member caucus to ensure that the labour perspective was tabled in the pesticide review. The caucus drew its membership from the CLC, the Canadian Paperworkers' Union, the Canadian Union of Public Employees, United Farmworkers, the Energy and Chemical Workers Union, the Brotherhood of Maintenance of Way Employees, and people involved in labour research. The caucus' activities were coordinated by a staff member of the CLC.

The Canadian Forest Industries Council, the Canadian Pulp and Paper Association and the Canadian Institute of Forestry

The organizational structure of Canada's forestry sector has historically been very fragmented. Thus, three organizations joined forces to select one delegate in the pesticide registration review:

- The Canadian Forest Industries Council (CFIC) has fulfilled the role of an overarching peak association for the forestry sector since its inception in 1983. The CFIC lobbies federal and provincial governments on trade and resource issues, and has also established a national forest industry database.

- Founded in 1913, the Canadian Pulp and Paper Association (CPPA) is a highly developed, national direct membership association "well prepared for both policy advocacy and participation" (Coleman, p. 211).
- The Canadian Institute of Forestry (CIF), a professional association, is the latest name for the Canadian Society of Forest Engineers.

A National Forestry Congress was held in 1986. It led to the creation of a special government-business task force designed to build consensus on the major challenges facing the forestry industry in Canada. The National Forestry Sector Strategy (NFSS), a set of 34 recommendations, was announced in 1987 and became the focal point for industry involvement in pesticide issues. The CPPA, for instance, directed its Forest Policy Committee to rank the NFSS's recommendations in order of priority. Pesticide use - encouraging the development and use of alternative (i.e. non-chemical) pest control methods and accelerating research into the environmental effects of pesticides - ranked third.

The CFIC, the CPPA and the CIF channelled their positions into the pesticide review through a common delegate. The Canadian Council of Forest Ministers served as the forestry sector's caucus.

Biologics Pesticides Caucus

One member was appointed to the Review Team to represent the interests of Canada's emerging biologics sector. The biologics caucus consisted of three experts in biological control methods, all from the Centre de developpement Agro Biologique du Quebec.

Appendix B

A COMPARATIVE PERSPECTIVE ON MODES FOR PESTICIDE REGISTRATION: THE UNITED STATES AND BRITAIN

The following descriptions of pesticide registration in the United States and Britain bring a comparative perspective to the dissertation's analysis of modes for pesticide registration in Canada. The American and British regimes sit at opposite ends of the conventionally-understood spectrum of modes for regulation.¹ As discussed in Chapters 6 and 7, both were influential in the federal pesticide registration review.

The American Agency Model: The Environmental Protection Agency

The astonishing increase in the use of synthetic pest control products after World War II (see Chapter 4) sparked the first direct intervention in the pesticide area by the United States government. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) introduced a system of compulsory registration in 1947.² Similar to Canada's older Agricultural Pests' Control Act, FIFRA was essentially a truth-in-labelling law, with the principal aim of ensuring "a stable marketplace within which the commercial needs of farmers and chemical makers could be promoted" (Bosso, 1988, p. 5). The basic regulatory requirement was that manufacturers register their formulations and disclose accurate information on product labels. Manufacturers also had to testify that their pesticides worked (i.e. efficacy).

The contours of the pesticide registration community were clear-cut. Again, there were parallels with the Canadian situation. The U.S. Department of Agriculture (USDA) had exclusive responsibility for the registration system under FIFRA. The

¹ While the discussion here naturally focusses on modes for regulation, it is important to keep in mind that there are a number of other major points of comparison between the American and British pesticide regulatory regimes. Vogel makes the general observation that: "[n]otwithstanding the common roots of their political and legal systems, [the American and British] approaches to environmental regulation [a category which for Vogel includes the regulation of toxic chemicals] differ from each other more than do those of any other two industrialized democracies." (p. 21) Some of the most interesting differences in the pesticide area concern self-regulation, the use of uniform standards, legalization of the regulatory process, the scope of administrative discretion and the pattern of interest politics.

² As in Canada, there is a federal dimension to pesticide regulation in the United States. The state level has jurisdiction over actual use.

Department maintained a clientele relationship with farm interests, specifically the American Farm Bureau Federation and the National Council of Farm Cooperatives. The other key axis in the policy community was between the Department and pesticide manufacturers. Industry was represented by the Agricultural Insecticide and Fungicide Association (known today as the National Agricultural Chemicals Association) and the National Association of Insecticide and Disinfectant Manufacturers (the predecessor of the Chemical Specialties Manufacturers Association). The House and Senate Agriculture Committees, which had oversight responsibilities for FIFRA, closed out the traditional "iron-triangle".

Pesticide registration was transformed in the 1960s into a pluralist regulatory regime. A number of factors explained this. Of critical importance was the USDA's shattered legitimacy. Although FIFRA officially put the registration system in Agriculture's hands, several other departments had successfully eked out roles for themselves in the larger pesticide policy process during the preceding years. In practice, then, the registration system had become highly fragmented. The USDA's Pesticides Regulatory Office regularly faced challenges from the Department of Interior (through the Pesticides, Wildlife and Fish Office) and the Department of Health, Education and Welfare (through the Office of Pesticides). As Graham has pointed out, each of these departments owed allegiance on pesticide matters to different interests and causes. Several attempts had been made to improve coordination (for example, through the establishment of a Federal Pesticide Control Review Board and later a Federal Committee on Pest Control). Nevertheless, inter-bureaucratic conflict reached unprecedented levels in the 1960s. Another factor which undoubtedly contributed to Agriculture's decline in status was the discovery that the Department had repeatedly violated FIFRA and several related inter-agency agreements.

The registration policy community may be relatively unique because recasting was driven primarily by forces within government, not outside interests (Nownes, p. 4). However, the impact of outside pressures cannot be completely ignored. Hoberg explains that newly-discovered scientific evidence about the risks of using pesticides undermined the old registration regime's knowledge base. Further, the environmental movement injected a powerful new perspective on pesticides into the regulatory arena. The latter led to accusations that the USDA had a pro-pesticide bias, but also to direct confrontation with the Department over a highly controversial pesticide, namely DDT.

Pressures for reform culminated in the 1972 transfer of regulatory responsibility for pesticides from the USDA to the Environmental Protection Agency (EPA). The EPA had been created two years earlier, following advice from a Nixon-appointed task force that an independent agency be set up with a mandate for comprehensive environmental protection. The EPA's creation was also a "political move[] informed by a theory of how to best prevent a regulatory agency from being 'captured' by industry or afflicted with bureaucratic sloth" according to Marcus (p.

267). Fifteen programmes - on air quality, water pollution, solid waste management and radiation - and managed by five different government bodies - the Departments of Agriculture, Interior, Health, Education and Welfare, and the Atomic Energy Commission - were merged into the EPA in December 1970.³ The Agency's regulatory responsibilities were eventually extended to cover noise, drinking water and toxic substances, including pesticides. Jurisdiction over pesticide registration was formally acquired in 1972, under the Federal Environmental Pesticides Control Act.⁴

When the mode changed, FIFRA was also rewritten. The new guiding principle for the registration system was whether a pesticide could perform its intended function without causing "unreasonable adverse effects". These were defined in the legislation as "any unreasonable adverse risk to man or the environment" taking into account "the economic, social, and environmental costs and benefits" of the pesticide's use. Under the 1972 amendments, the EPA was authorized to register only those pesticides that met this standard, and was also required to revoke registrations for pesticides that were subsequently determined to violate it. This marked a fundamental shift in the government's philosophy of regulation: from protecting farmers and the pesticide industry to an explicit balancing of benefits and costs.

The EPA-based mode for pesticide registration continues in effect today. The only significant change concerns the role of the Department of Agriculture. The farm sector succeeded in partially rehabilitating Agriculture's tarnished image after the EPA deregistered a series of pesticides amid controversy in the early 1970s (including DDT, aldrin/dieldrin, chloradane and heptachlor). After heavy lobbying, the Secretary of Agriculture was awarded an advisory role in many registration decisions and must therefore be consulted in advance by the EPA. The registration system is currently administered by the EPA's Office of Pesticides Programs (OPP).

In the early 1980s the pesticide registration system was targetted (with about 30 other programmes) for special review by the Reagan government's vice presidential Task Force on Regulatory Relief. The OPP's budget was consequently slashed 21% in 1983 (to \$32-million) and personnel resources were reduced 30% (to 525 positions). The Reagan reforms also included installing a handpicked management team at the EPA, easing the data requirements for applications for registration as well as privatizing a number of regulatory activities, such as data evaluations and standard-

³ The official statutory instrument was the Reorganization Plan No. 3, 1970 (5 U.S.C. app.), effective December 2, 1970.

⁴ In addition to registering pesticides, the EPA sets tolerance levels for pesticides that occur in or on food. This contrasts with the situation in Canada where registration falls within the jurisdiction of Agriculture Canada and food residues within the jurisdiction of Health and Welfare (see Chapter 4).

setting. Pesticide deregulation was not, however, a complete success story (Hoberg).

The second half of the 1980s clearly showed the limits of any kind of regulatory reform in the pesticide area. In a development that caught many off-guard, environmental, chemical and congressional interests joined forces to draw up an omnibus plan for revising FIFRA. This unusual coalition proposed changes to all aspects of the registration system - from speeding up the approval process and revising the requirements for (re)registration, to improving public access to industry health and safety data and providing sanctions against invalid or fraudulent data. A package of reforms was submitted for congressional approval in March 1986. However, under the weight of opposition from the farm sector, the coalition fell apart almost immediately. President Reagan signed a watered down bill in late 1988. Dubbed FIFRA-lite, the legislation removed all indemnification for manufacturers whose products are ordered off the market and gave the EPA nine years to reevaluate 600 active ingredients.

Many of the controversial issues left unresolved by FIFRA-lite are expected to dominate the U.S. pesticide agenda in the 1990s. These include: groundwater contamination, patent protection, occupational exposure and harmonization with regulatory regimes in other countries. The Clinton administration introduced a sweeping proposal to overhaul the pesticide regulatory system in late 1993, acting on a U.S. Supreme Court ruling.⁵ The proposal deals primarily with the food safety aspect of pesticide regulation (a single residue standard for raw and processed foods, based exclusively on risk) rather than registration.⁶

The British Departmental Model: The Ministry of Agriculture, Fisheries and Food

Pesticides became a significant regulatory controversy much later in Britain than North America. This was partly because chemical use was a great deal more restricted. The farm sector relied less heavily on monoculture and, for geographical reasons, crops were less likely to be damaged by insects.

⁵ The EPA announced soon after the decision, Les v. Reilly, that it would be obliged to withdraw registrations for over 30 commonly used pesticides if appropriate reforms were not approved by Congress. The facts of the litigation and its implications are discussed in Cooper, pp. 86-7.

⁶ The EPA also oversees this part of pesticide regulation. Tolerance levels (the maximum quantity of pesticide residues that are allowed on food) are set under the 1954 Food, Drug and Cosmetic Act.

Another critical factor was the structure of regulatory politics. As Vogel has shown, the British pesticide registration system operated on the principle of cooperation and trust between government and the chemical manufacturing industry. This began to change only as of the 1970s when environmental pressure groups and public health interests agitated for increased influence in pesticide policy- and decision-making. Despite this development, the lead regulatory authority, the Ministry of Agriculture, Fisheries and Food, maintained its pristine image in the public's eye as uncompromised and uncaptured. Long-term equilibrium in the regulatory regime was further buttressed by the British scientific community's unwavering, uncritical support for pesticides. According to Watterson, this attitude derived from extreme skepticism about the legitimacy of risk assessment and cost-benefit studies.

From the 1940s to the mid 1980s the British pesticide regulatory framework was based on a series of voluntary agreements between government and industry (mainly through the British Agricultural Chemical Association). The Agricultural Chemicals Approval Scheme (ACAS), established in 1942, promoted efficacious use of agricultural and horticultural pesticides. The Pesticide Safety Precaution Scheme (PSPS) came into effect twelve years later, in 1957. As suggested by its name, this second scheme addressed growing concerns about pesticide safety. Manufacturers agreed that the safety of all new pesticides and new uses for approved products would be subject to independent, pre-market scientific assessment. The Advisory Committee on Pesticides (ACP), a body of leading pesticide experts (scientists and physicians), was set up for this purpose and also to advise the government more generally on the control of pests. Opportunities for public participation were virtually non-existent in this early regulatory regime. The Advisory Committee, for instance, "ordinarily [did] not justify its scientific conclusions in public" (Brickman et al., p. 42).

Statutory controls on pesticides were introduced in 1985-86, when the ACAS-PSPC regime was superseded by the Food and Environment Protection Act (FEPA, Part III) and the Control of Pesticides Regulations (COPR).⁷ The new regime prohibits the advertisement, sale, supply, storage, disposal and use of pesticides unless they have been approved, or registered. There is a three-part test for registration: applicants must demonstrate through scientific data that their products pose no unacceptable risk to people, non-target species or the wider environment; that they are effective; and, where appropriate, that they are humane. Pesticides are approved by the Minister of Agriculture, Fisheries and Food (MAFF) and the Secretary of State for Employment. Six ministers in total, however, must be satisfied (usually based on

⁷ FEPA also granted statutory authority to promulgate regulations concerning the food safety dimension of pesticide regulation. The Pesticides (Maximum Residue Levels in Food) Regulations took effect in 1988 and apply to cereals, foods of animal origin (i.e. meat, milk and eggs) and fruit and vegetables.

data summaries compiled by MAFF) that a pesticide meets the regulatory criteria before it can be marketed. The other ministers are those responsible for Environment, Health, Scotland and Wales. The 1986 changes also made the expert ACP a statutory body.

In contrast to Canada, two authorities are responsible for administering the British pesticide approval and review system. The Ministry of Agriculture, Fisheries and Food's Pesticide Safety Division (PSD and now, as explained below, the Pesticide Safety Directorate) handles "agricultural" pesticides.⁸ The Health and Safety Executive⁹ is responsible for what are called "public hygiene" pesticides (microbials). The PSD is the closest counterpart to Canada's Pesticides Directorate.

The PSD became part of MAFF's Food Safety Directorate in a 1989 reorganization. Its main function is to discharge the pesticide responsibilities placed on the Minister of Agriculture under Part III of FEPA, as well as under European Community law. The PSD's other duties include research and compliance and acting as a secretariat for the ACP.

There are two streams in the PSD registration process. The committee procedure applies to new active ingredients and formulations. Applicants' supporting scientific evidence is reviewed by the ACP and its Sub-Committee on Pesticides (comprised of toxicologists, occupational physicians, agronomists and veterinary scientists). The ACP's recommendations are then forwarded to the six government departments for decision. Experimental permits and minor amendments to previously-approved products (e.g. label extensions) are evaluated under the non-committee procedure, where PSD advises ministers directly. The PSD commanded approximately 75 person-years and was divided into nine branches at the time of the pesticide review in Canada.

As in Canada, there was tremendous workload pressure on the British pesticide registration system in the late 1980s. This was caused primarily by the need to

⁸ The terminology is somewhat misleading, in the sense that PSD is responsible for pesticide products coming within a very broad range of uses (i.e. agriculture, horticulture, forestry, industrial herbicides, pesticides in or near water, food storage, home kitchens and larders, home garden, animal husbandry and vertebrate control).

⁹ The Health and Safety Executive is an executive agency responsible, through its Director General, to the Secretary of State for Employment. Its activities are overseen by the Health and Safety Commission, a multi-stakeholder body with members from government, unions and industry.

reevaluate older pesticides and a flood of submissions for new active ingredients, especially herbicides. On average it took four years for an active ingredient to go through the complete approval process. A major review of the registration system was eventually undertaken and, in 1990-91, the government promised a "substantial" infusion of new resources to make the registration system more effective.¹⁰

The Pesticide Safety Division became an executive agency under the Next Steps initiative in April 1993. It is now called the Pesticide Safety Directorate. As an executive agency, the 200-person PSD is headed by a Chief Executive who is responsible to the Minister of Agriculture, Fisheries and Food for day-to-day operation of the registration system and for meeting prescribed performance targets regarding financial matters, efficiency, service delivery and scientific quality. The Minister retains responsibility for determining the overall policy and financial framework. The relationship between MAFF and the PSD is managed through an Ownership Board. The other major change has been the introduction of cost recovery. Two-thirds of the agency's operating costs are covered by approval fees and an annual levy on manufacturers' U.K. sales. The remaining third comes from PSD's other customer, MAFF.

The major issue presently facing the registration system is the European Community pesticide registration directive. Compliance requires harmonization with EC standards, and also obliges the British government to carry out its share of product evaluations. A number of mode-related solutions have been proposed. These include co-locating all pesticide officials on one site (planned for 1994-95 and which is expected to "lead to long term gains in efficiency"¹¹) and contracting-out product reviews to independent testing laboratories.

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¹⁰ Agrow, April 12, 1990.

¹¹ Pesticide Safety Directorate. U.K. Ministry of Agriculture, Fisheries and Food. The Work of the Pesticides Safety Directorate. MAFF Publications, 1993, p. 15.

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