AN EVALUATION OF THE INDUSTRIAL DEVELOPMENT PERMIT PROCESS IN ALBERTA

BY

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A Practicum
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
for the Degree of

MASTER OF NATURAL RESOURCE MANAGEMENT

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DEDICATION

I dedicate this Practicum to my father, Chrysant L. Dmytruk, who
was one of the individuals instrumental in implementing
the Industrial Development Permit process
and whose foresight, experience, and strength
have been inspirational to me.

ABSTRACT

The Industrial Development Permit, issued by the Alberta Energy and Utilities Board, regulates energy use, facility siting, socio-economic impacts, and environmental concerns in Alberta. The process was implemented in 1974 to regulate hydrocarbon consumption above a specific threshold, to increase the efficiency of hydrocarbon use, and to ensure public participation. Twenty one chemical company respondents, four government department respondents, two Alberta Energy and Utilities Board respondents, and five interest group respondents were surveyed to determine satisfaction with the process.

All respondents considered the process to be beneficial and noted improvements. Areas needing improvement were: process cost and requirements, expediency, inter-process coordination, and intra-process communication. Stakeholder satisfaction varied: government respondents were mostly satisfied (85%); agency respondents were fairly well satisfied (75%); and company respondents were moderately satisfied (70%) with the process; and interest group respondents were mostly satisfied (85%) with the public participation process. Government respondents favored adapting and simplifying the process. Agency respondents were previously aware of some difficulties identified. Companies were concerned with cost and expediency. Interest group respondents recognized the efforts of the companies but remained somewhat skeptical of company motives.

A schedule for process revision; a communication system; legislative amendments; an updated Guide to Content; greater coordination with environmental processes; continued public involvement; and periodic evaluations were recommended to facilitate process improvement.

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LIST OF ACRONYMS

Acronym	Full Name
AEP	Department of (Alberta) Environmental Protection
AEPEA	Alberta Environmental Protection and Enhancement Act
CCPA	Canadian Chemical Producers' Association
ED and T	Department of Economic Development and Tourism
EIA	Environmental Impact Assessment
EUB	(Alberta) Energy and Utilities Board
IDP	Industrial Development Permit
IHRD	Industrial Hydrocarbon Review Board
NAFTA	North American Free Trade Agreement
NEP	National Energy Program
NOP	National Oil Policy
NRCB	Natural Resource Conservation Board
O.C.	Order in Council
QMAS	Quality and Management Service
UNIDO	United Nations Industrial Development Organization

GLOSSARY

Term	Definition
Alberta Energy and Utilities Board:	The regulatory board which regulates oil and gas production and shipment as well as electric power rates and generation, and issues the Industrial Development Permits.
Energy Resources Conservation Board:	The Current Alberta Energy and Utilities Board.
Hydrocarbon:	A chemical compound made up of only hydrogen and carbon
Industrial Development Permit:	A permit, for the use of Alberta-produced energy resources in any industrial or manufacturing operations in the province, applied for under the legislation of the Oil and Gas Conservation Act to the Alberta Energy and Utilities Board. Its issuance is subject to authorization by the Lieutenant Governor in Council.
Interveners:	" a person or a group or an association of persons who, in the opinion of the Board, (a) has an interest in, or (b) is in actual occupation of or is entitled to occupy land that is or may be directly and adversely by a decision of the Board in or as a result of proceeding before it, but, unless otherwise authorized by the Board, does not include a person or group or association of persons whose business includes the trading in or transportation or recovery of any energy resource." (ERCA, 1980, Section 31(1))

Petrochemical:

A substance that has been produced from petroleum (oil) or natural gas through an industrial process.

Public Interest Groups:

"Organizations who represent large segments of society that generally have difficulty mobilizing resources in order to influence political decisions...no special claim to represent public but represent interests that are often underrepresented before decision-makers who determine issues in the public interest" (Englehart and Trebilcock, 1981).

Raw materials:

Energy resources which undergo chemical reactions in conversion to chemical products

Regulatory Agency:

Refers to statutory regulatory agencies who deal with prior assessment and periodic review hearings as well as virtually any public body that holds hearings or reviews submissions (Englehart and Trebilcock, 1981).

Regulatory Policy:

"refers to that which is primarily intended and/or authorized to regulate individual or corporate behavior rather than goods or services" (Sabatier, 1977, p. 418).

The Regulatory Process:

"interpreted expansively and refers to formal proceeding before regulatory agencies, hearings by legislative committees, Royal Commissions, Task Forces, and the like on issues pertaining to government regulations, and informal representational settings where advocacy efforts can be directed to politicians or bureaucrats in an attempt to influence regulatory policy" (Englehart and Trebilcock, 1981, p.xi).

CHAPTER 1 - INTRODUCTION

1.1. Preamble

The Industrial Development Permit (IDP) process was implemented in 1974 to regulate energy use, facility siting, social and economic impacts, and environmental concerns in the Province of Alberta. The relevant legislation and regulations mandated the regulatory agency, the Alberta Energy and Utilities Board (EUB) (formerly the Energy Resources Conservation Board (ERCB)), to issue IDPs. In the ensuing 23 years, industrial projects using nonrenewable resources, such as natural gas, ethane, coal, and oil, in production and using nonrenewable resources as energy sources, such as pulp mills and fertilizer and petrochemical plants, were assessed. The assessments were conducted in order to secure company efficiency, to regulate hydrocarbon consumption above a specific threshold, to determine optimal site location, to gather social, economic, and biophysical information, and to ensure public involvement.

The EUB examined the need for and efficiency of the IDP process in 1992 as part of an quality management initiative. In 1995, an evaluation of the IDPs issued to chemical companies was conducted using information gathered from the EUB, Alberta government departments of Economic Development and Tourism (ED and T), and Alberta Environmental Protection (AEP), representative companies from chemical industry, and several interest groups.

1.2. Background

1.2.1 Industrial Development Permit Origin and Initial Direction

Alberta, prior to the 1970s, had no specific legislation dealing with the evaluation and approval of petrochemical plant development. Legislative changes were introduced, in the early 1970s, in the form of regulation of industrial development (Alberta Hansard, 1974). The regulation was undertaken to manage hydrocarbon consumption above a specific threshold, to reduce regulatory requirements for facilities consuming resources below a specific threshold, and to assure the efficient use of hydrocarbon resources due to a perceived future energy shortage.

The Department of Industry and Commerce, now the Department of Economic Development and Tourism, identified the need for phased development that would recognize the impact of energy resource usage in industrial projects (Govier et al., 1974). Phased development was considered necessary in order to optimize the use of hydrocarbon resources by a large number of chemical companies interested in constructing facilities in Alberta.

On June 6, 1974, the Oil and Gas Conservation Act was amended to incorporate the requirement for an Industrial Development Permit (IDP). Section 30 (previously Section 42) of the Act stipulated that no gas or gas product produced, in Alberta, would be used, as a raw material or fuel, in any industrial or manufacturing operation unless authorized by the ERCB. In addition to monitoring gas use, the ERCB would not grant

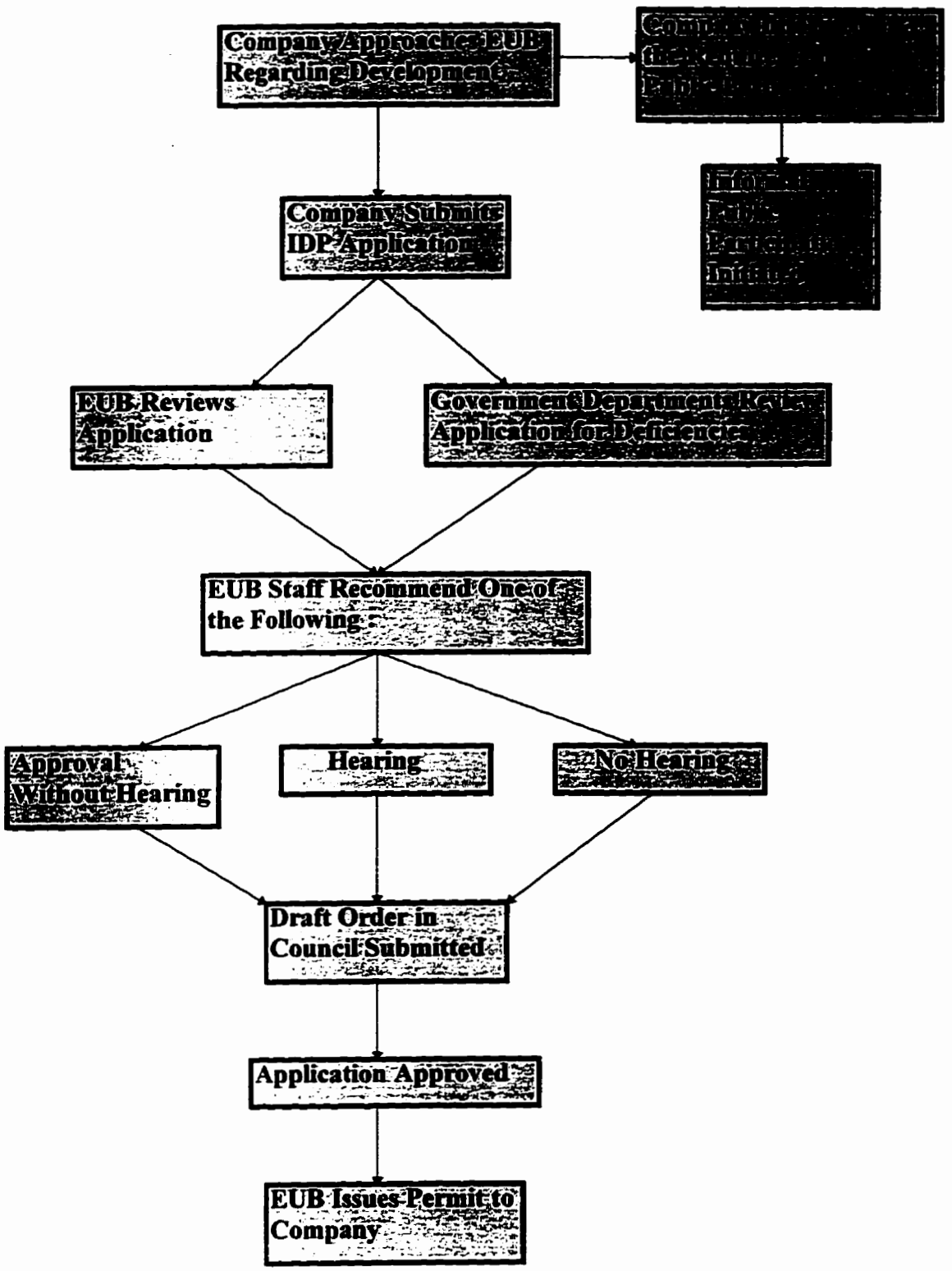
the permit unless, in its opinion, it was in the public's interest to do so having regard to 1) the efficient use, without waste, of energy resources and 2) the present and future availability of hydrocarbons in Alberta (Govier et al., 1974). The permits were to be granted between the years 1974 to 2004 (Govier et al., 1974).

1.2.2 A Simplified Industrial Development Permit Process Description

The IDP process was initiated when the ERCB was notified by a company of the potential for a facility that might use energy resources above a volume stipulated in the Act. Once an application was filed with the ERCB, it was evaluated through a stepwise process by the ERCB with input from interested government departments (Figure 1). The IDP applicant was required to provide information pertaining to the project, such as technical, biophysical, social, and economic information, as outlined in the Industrial Development Permit Application Guide to Content (ERCB, 1981).

The permit required approval from the regulatory agency, government departments, and cabinet. Prior to granting of an IDP permit, the ERCB may require that an Environmental Impact Assessment (EIA) be completed and approved. The requested EIA document would then become part of the IDP application in place of the required environmental information. Once the reviews were completed, the permit was issued by the ERCB, as authorized by the Lieutenant Governor in Council.

Figure 1. Simplified Flowchart of the Industrial Development Permit Process



The permits are granted for a 15 to 20 year period to companies for particular facilities that use energy resources as raw materials and/or fuel above a volume of energy use specified in the Act. The company would be able to request a specific duration for the permit. The duration would be dependent on the economic constraints of the project.

As part of the IDP process, the ERCB urged the company to inform the affected communities of its intent to construct the proposed plant. The information was disseminated through information sessions and other methods which encouraged public participation. During a hearing, the interveners, were able to obtain from the EUB a copy of the company's application which presented the facility's developmental plans, technological processes, and environmental impacts.

In addition to the company's efforts, upon receiving a completed application, the ERCB issued a public notice and set a hearing date, as required by Section 29 of the Oil and Gas Conservation Act. The aim of the public notice was to inform the local residents, municipalities, and other affected companies of the proposed facility. Once the public notice was issued, any objections to or support for the proposed development were filed with the ERCB. Where no objections or interventions were received relating to the proposed facility, a hearing normally was not held. However, if objections or interventions were registered, the company would first attempt to address the concerns on its own. A formal hearing was held when a settlement could not be reached.

1.2.3 Industrial Development Permit in 1994-95

In 1994-95, industrial development projects were still subject to the permit requirements established in 1974. Over the past 23 years permits have been granted to fertilizer, chemical and petrochemical companies, refineries, and pulp and paper mills. As of September 1, 1996, 24 chemical companies possessed IDPs issued pursuant to Section 30 of the Oil and Gas Conservation Act (Map 1).

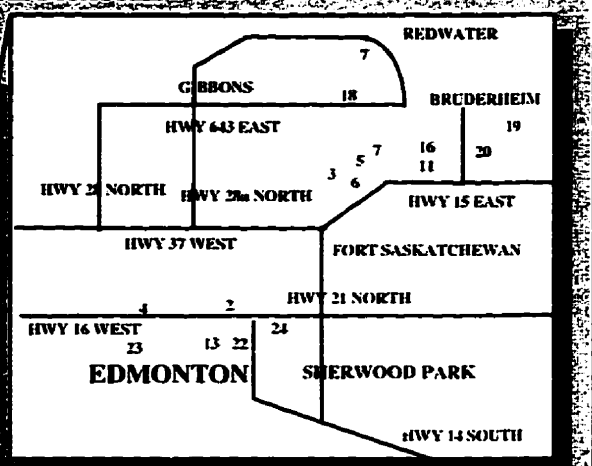
The IDP process has evolved over time with three notable adaptations. First, in 1994, the ERCB amalgamated with the Public Utilities Board (PUB) to form the Alberta Energy and Utilities Board (EUB) (The Globe and Mail, 1994). This amalgamation did not affect the jurisdiction of the EUB or the scope of the IDPs. Secondly, by 1994-95, energy and energy resources were no longer perceived to be in short supply. Thus, although energy efficiency continues to be a primary requirement for renewed permits, more emphasis has been placed on the promotion of increased public participation in the location of facilities (MacDonald, 1995, personal communication). Thirdly, the Klein government launched a general review of all Acts and Regulations. This review led to the 1996 transfer of Ministerial authority for the IDP from the Department of ED and T to the Department of Energy.

In 1994-95, the IDP process coordinated the needs of the companies, the regulatory agency, the government, and the public. Individuals within each of the stakeholder groups, at various times in the past 23 years, have expressed their perceptions

Map 1

CHEMICAL OPERATIONS IN ALBERTA

- Locations -



CHEMICAL COMPANIES

1. Agrium Inc.
2. Celanese Canada Inc.
3. Viridian Inc.
4. Borden Inc.
5. Dow Chemical Canada Inc.
6. Thio-Pet (Div. of Viridian Inc.)
7. Viridian Inc.
8. Cancarb
9. Methanex Corporation
10. Canadian Fertilizers Ltd.
11. The Geon Company
12. Alberta & Orient Glycols Co.
13. AT Plastics Inc.
14. Union Carbide Corporation
15. NOVA Chemicals Ltd.
16. Shell Canada Limited
17. Agrium Inc.
18. DuPont Canada Inc.
19. CXY Chemicals
20. Alchem Industries Ltd.
21. Sterling Pulp Chemicals Ltd.
22. Alberta Envirofuels
23. Laporte PLC
24. Canadian Liquid Air Ltd.
25. National Silicates Limited
26. ICI Canada Inc.
27. Praxair Inc.

of the function and efficiency of the IDP process. In order to amalgamate current comments and to ensure that the process continued to meet the needs of all stakeholders, an evaluation of the stakeholder perceptions of the process was conducted. The information collected in the evaluation would aid in the process reflecting new realities. The following research examined the satisfaction of the stakeholders with the IDP process and its public involvement.

1.3. Issue Statement

The IDP process, introduced in 1974 and administered by the Alberta Energy and Utilities Board, was intended to regulate the efficient use of energy resources in the Province of Alberta. The process has been a vehicle to regulate industrial hydrocarbon resource use, facility citing, social and economic impacts, and environmental concerns, and to enable public participation in plant location decisions. The efficiency and effectiveness of the regulatory process, and the nature and extent of stakeholder satisfaction with process design and implementation of the IDP process have been debated over the past 23 years. In order to ascertain the perspective of the IDP process in 1995, an evaluation of the stakeholder satisfaction would have to be completed.

1.4. Objectives

The primary purpose of the research was to evaluate the IDP process through an assessment of stakeholder views in Alberta. Stakeholders were identified as the regulatory agency, relevant government departments, affected chemical companies,

and relevant interest groups. These stakeholder groups were surveyed to determine the level of satisfaction with the process.

The specific objectives of the research included:

1) to develop a contextual framework for the IDP evaluation;

2) to describe the main components of and involvement of stakeholders in the Industrial Development Permit process;

3) to identify the chemical companies which had obtained IDPs and their public;

4) to describe the IDP process and determine the **main objectives and measurable goals**, in consultation with the Department of Economic Development and Tourism, the Alberta Energy and Utilities Board, and identified chemical companies;

5) to establish **criteria for evaluation**, based on the measurable goals, of the Industrial Development Permit process;

6) to determine the satisfaction of the Alberta government Departments of Economic Development and Tourism and Environmental Protection; the Alberta Energy and Utilities Board; the chemical companies; and several interest groups with respect to the Industrial Development Permit process design and implementation;

7) to prepare recommendations for the improvement of the Industrial Development Permit process based upon the findings.

1.5. Hypotheses

The hypotheses for the research project were:

1) The Alberta government departments, the chemical industry, and the local communities were currently satisfied with the efficiency and effectiveness of the Industrial Development Permit process;

2) Public participation in the Industrial Development Permit process lead to acceptance of industrial plants in the local communities;

3) The Industrial Development Permit Process resulted in a more efficient use of the hydrocarbon resource in Alberta.

1.6 Organization

The research is organized into six chapters. The subject matter of the chapters is as follows:

Chapter II contains a general review of regulations and regulatory policy, public participation in regulation, and evaluation of regulation.

Chapter III expands on the information about the Industrial Development Permit process presented in Chapter I. The chapter presents information on the evolution and description of the process; the coordination of the process with environmental assessments; and the description of other relevant Acts and regulations, which require an Industrial Development Permit to be completed.

Chapter IV is the methods chapter which discusses: the content of and manner in which a literature review is to be conducted; the file search procedure; the method used to conduct the evaluation through questionnaire and mail-out surveys; the determination of the sample population; the content of the questionnaires; and the analysis of the results.

Chapter V contains the results obtained from implementing each of the research methods outlined in Chapter IV. The results are presented in terms of design and implementation related to clarity of process, process relevance, public participation, cost considerations, time considerations, and existence of the process.

Chapter VI consists of the discussion of the results. The results are discussed within the framework of the literature and current policy perspectives. The discussion presents some implications for the IDP process based upon the results.

Chapter VII provides the conclusions and recommendations based on the IDP process evaluation.

CHAPTER II - OVERVIEW OF REGULATION, PUBLIC PARTICIPATION IN REGULATION, AND EVALUATION OF REGULATION IN CANADA

2.1. Introduction

A review of literature was conducted to provide context for the IDP process research and to outline a framework within which regulations could be understood and evaluated. Regulation and the regulatory process will be defined and the classification of regulation will be examined. The classification established the framework within which the evolution of Canadian regulation will be discussed. Subsequently, regulation and regulatory processes in use by government and agencies, public participation in regulatory processes, and the need for evaluation will be presented.

2.2. Defining Regulation

Regulation is one of an array of governing instruments in the political process which has been a long-standing focus of concern and for that reason has featured prominently on public agendas of governments, businesses, and academics (Paehlke, 1990 and Schultz and Alexandroff, 1985). Examples of regulatory instruments used by governments implementing policies and agendas are: 1) granting permits and licenses, 2) granting exceptions or variances to the regulation; and 3) treatment of recalcitrance (Sabatier, 1977).

The regulatory process has been interpreted, in the broadest sense, to be one of the essential functions of government. Some academics purport regulation encompasses instruments such as taxation and expenditure (Hartle, 1979), while other authors, such as Doern and Phidd (1992) and Peacock et al. (1984), do not agree. Peacock et al. (1984) suggested that, although government regulation can be synonymous with just about any policy action. The authors considered regulation to encompass government activities of a non-fiscal nature.

The regulatory decisions made by governments involve values, interests, and conflicts. Individuals, within government, made choices based upon these elements for the benefit of the public (Reagan, 1987). Individuals involved in formulating regulation have been confronted with reward - punishment systems that are often unique to the function they perform. These functions either bolster or deter some forms of behavior on the part of individuals (Hartle, 1979).

Numerous definitions have been developed as means of elucidating the various perspectives pertaining to the functions of regulation and regulatory processes. As a comprehensive definition of regulation does not exist, several examples are provided.

> The process of regulation, says Geoffrey Vickers, is a continuing transaction between the governors and the governed. It is "a mutual transaction: persuasion, authority, bargain, and threat move from the governed to the governors, no less than from governors to governed" (Doern, 1978, p.1).

> Regulation is "a rule of conduct, enacted by a regulation making authority pursuant to an Act of Parliament, which has the force of law for an undetermined number of persons; it does not matter if this rule of conduct is called an order, a decree, an ordinance, a rule, or a regulation" (Doern, 1978, p.1).
>
> Regulation is a process consisting of the intentional restriction of a subject's choice of activity, by an entity not directly party to or involved in that activity (Schultz and Alexandroff, 1985, p.2).

Regulation, in the above examples, was seen as having a diversity in scope while maintaining the final decision-making external to the private sector. Vickers, in Doern (1978), interprets regulation to be a process of transaction where the governors and the governed had equal responsibility. The responsibility can be illustrated as the rules of conduct approved of by the state. The rules of behavior, dealing with regulation, were delegated, involved ministers and regulatory agencies, and lacked the same routinized decision process which existed for spending and taxation (Doern and Phidd, 1992).

The second definition was similar to Theodore Lowi's classification of policy outputs because regulation is one of government's main functions and instruments. However, the classification avoided the details of administrative distinctions (Doern, 1978). The last definition displayed a perceived division between those who implement regulation and those who are regulated.

The definitions, among others, attempted to define the broad and flexible instrument of regulation amidst a confusing mix of intentions, consequences, objectives, tools, processes, and targets (Hartle, 1979 and Schultz and Alexandroff, 1985). In the

formation of regulation and its definitions, one must keep in mind that regulation should address equity, due process, and other values that would not otherwise be properly represented in the market (Economic Council of Canada, 1979).

In light of the various definitions, Schultz and Alexandroff (1985) stated the importance of stipulating descriptive parameters for individual studies because the parameters provide focus, establish boundaries, and underline specific policy problems which research and analysis seek to address. With the requirement of parameters in mind, the following section will present the different classifications of regulation.

2.3. Classification of Regulation

A system of classification commonly cited in literature exists to aid in understanding and analyzing the uses of regulation and types of regulatory instruments. The system consists of economic and social regulation.

The distinction between economic and social regulation can be unclear due to the overlap present between the two forms of regulation. Reagan (1987) illustrated the potentially ambiguous nature of regulation through the examination of energy and healthcare. He stated that energy and healthcare had simultaneously manifested price, entry, and non-financial purposes under the same statutes and administrative processes. The presence of overlaps between the regulatory classifications must be kept in mind when examining functioning regulatory regimes.

2.3.1. Economic Regulation

Economic or business regulation, a term which has been used to describe the majority of the traditional regulatory functions, has also been referred to as "direct", "industry specific", "old", or "traditional" regulation (Economic Council of Canada, 1979). The main objective of economic regulation was to impose constraints which were designed to significantly alter the behavior of the private sector and to prevent the improper allocation of resources or market failures that could be caused by either natural monopolies or competition (Doern, 1978 and Economic Council of Canada, 1979). The political, legal, and institutional regulation were the primary methods used (Reagan, 1987).

The dominance and growth of economic regulation at federal and provincial levels was primarily due to rapid growth in the areas of expenditure, employment, and industry. The effects of increased regulatory control which would affect future quantities of regulation were two-fold: 1) increased government spending; and 2) private sector spending incurred by individuals and companies for compliance with regulations.

Economic regulation was originally criticized as a product of "capitalism by liberal progressives early in this century and of a desire to "restore" competitive forces and efficiency, or at least prevent things from getting worse. In Canada such regulation

was also based on a desire to prevent incursions from the American giant and therefore embodies nationalism" (Doern and Phidd, 1992, p. 199).

In the 1960s, economic regulation was developed to protect industries from monopoly extraction and to maintain quality and quantity of service (Reagan, 1987). However, the subject matter has expanded from the original purpose to encompass behaviors which governments are currently regulating. Some of the activities which are regulated are: the control of product or service price, the control of supply, the authorization of entry or exit into the industry or private sector, the maintenance of public safety, and the disclosure of information and rates of return (Economic Council of Canada, 1979 and Reagan, 1987). The regulations were for the most part developed to be industry specific and associated with public or crown ownership.

Reagan (1987) surmised that because a substantial portion of economic regulation has been developed to control monopoly, and other private enterprise, the aforementioned economic mechanisms and their associated inefficiencies were not as prevalent in the 1990s economy. The perceived balancing of economic forces and increased reliance on the market system has been proposed as a potential explanation for the movement toward deregulation.

The regulatory reforms attempted to reduce government intervention, in the private sector, by returning regulation to a market driven focus. The federal and

provincial governments of the 1990s are striving toward responsive regulation. The focus has been on making regulation more responsive to changing consumer demands, to the development of products which are safer, to unceasingly improving the technology of healthcare, to increasing knowledge of environmental impacts, and to the altering economic environment (Treasury Board Secretariat, 1993).

A number of challenges should be considered in creating regulation which is more responsive. The "key challenges that face Canada and its present regulatory system are:

- a marketplace that is increasingly global. Timeliness and quality are becoming ever more critical to business survival;
- the difficult fiscal situation facing all governments;
- increasing concerns about internal trade barriers;
- an ever greater pace of change in technology;
- a public that is very aware of health and environmental issues; more sophisticated business and labour communities." (Treasury Board Secretariat, 1993 p.1-2).

The incorporation of the five challenges into the evolution of the economic and social regulation would enable the public and private sectors to maintain a level of influence in the private sector.

2.3.2. Social Regulation

Social regulation was a relatively recent addition to the regulatory regime and has been called "new" or "health, safety, and environmental" regulation (Economic Council of Canada, 1979). Social regulation has been more concerned with public well-being than private sectors activities, has reflected a broad social objective, and has been considered

to be another phase in the criticism of capitalism in the late 1970's (Doern and Phidd, 1992; Economic Council of Canada, 1987; and Reagan, 1987). The regulatory focus was not industry specific and could be categorized into four broad areas: 1) health and safety; 2) environment; 3) fairness; and 4) culture.

Social regulation enabled governments to be indirectly involved in private industry. This form of regulation was directed at controlling the attributes of a product or service, at influencing the method of production, at influencing the conditions of employment, at disclosure of information, and at implementing resource management, environmental protection, public accountability, and conservation strategies (Brown-John, 1981; Doern and Phidd, 1992, Economic Council of Canada, 1979; and Olewiler, 1981). Government involvement in regulation occurred though further movement towards regulation which would terminate the perceived resource depletion, pollution, and the deception of consumers.

The regulatory reforms of the 1970s pressed for the inclusion of greater public participation in the regulatory process. Greater inclusion meant that "participation by public interest groups, some of which received, and still receive, public funds to enable them to participate on a reasonable financial footing" with other groups who did not have a "free-rider" problem (Doern and Phidd, 1992, p. 202). The inclusion of public participation in regulatory procedure has continued uninhibited into the 1990s.

2.4. Regulation in Use

The degree and form of regulations have varied considerably with the changing governmental ideologies and public moods. These variations, Brown-John (1981) cited as being affected by the proximate relationship "between geography, historical development, and the practicalities of economic survival and development" (p.16) of Canadian provinces which have a great diversity of resources. Due to the nature of the country, the realms of politics and economics were considered to be inseparable because "even the most ardent proponent of *laissez-faire* would concede, at a minimum, that government must be involved in the promotion and protection of commerce" (Brown-John, 1981, p. 16).

In Canada, the design and implementation of regulation has evolved into a complex system of federal and provincial organizational levels which formulate, administer, and ensure the efficacy of regulations. Society has been governed by government departments and by statutory regulatory agencies through the use of statutes and subordinate legislation (Economic Council of Canada, 1979).

2.4.1. Government

Government has two main roles with respect to regulation. The roles are 1) to ensure regulation is delegated and enforced and 2) to provide all interested parties with a method of presenting interests and concerns. The regulatory activities of the bureaucracy are dictated by the mandate of legislation and the politicians.

Elected politicians can issue directives, hear appeals to cabinet, and present amendments to existing legislation which institute and empower regulatory agencies, make appointments, approve agency budgets, and provide political and moral support to activities (Englehart and Trebilcock, 1981). "The reality is that cabinet can and does impose its decision of choice on a wide range of regulatory issues entrusted to regulatory bodies with statutory authority" (Hartle, 1979, p. 122.)

The regulations are administered by government departments which are subject to the control and direction of the minister. The responsibility of top level bureaucrats is to implement policies which maximize votes, advocate policies which will involve a larger role for the respective departments or ministries, maintain the economy, and conserve resources (Olewiler, 1981 and Treasury Board Secretariat, 1993). In order for policy implementation to be effective, governments must delegate responsibility. Subordinates are made accountable and responsible for carrying out duties, such as administration of regulations (Economic Council of Canada, 1979).

The reconciliation of different interests takes place within bureaucracy; therefore regulatory policies have the tendency to be state-centered in origin (Brown-John, 1981). Some of the policies brought forward by politicians have been due to the viewpoints and information presented by groups which were heavily engaged in lobbying (Treasury Board Secretariat, 1993). Within the bureaucracy, which is an expansion of the minister's

capacity, the delegation of responsibility must occur which guaranteed that political accountability ensured appeals by all aggrieved parties.

2.4.2. Regulatory Agencies

Familiarity with the structure of American and British systems was necessary because Canadian literature on regulatory agencies was scarce prior to the 1970s (Johnson, 1991, and Brown-John, 1987). The structure of both the American and British regulatory systems have served as templates for the Canadian regulatory model. The Canadian model is a combination of the independent regulatory agency system of the United States and the administrative accountability system used in Great Britain (Economic Council of Canada, 1979 and Brown-John, 1981).

The instigation of regulatory agencies in Canada "roughly seems to have paralleled their development in the United States, albeit without benefit of searching legislative committee appraisal or standardization by omnibus enabling statute" (Brown-John, 1979). Due to the unique configuration of democracy in Canada, the major regulatory agencies cannot be understood sufficiently by using either the concept of independent or captured agencies (Doern, 1978). Canadian agencies maintain the British parliamentary philosophy with American political cultural overtones (Brown-John, 1981).

2.4.2.1 Agency Capture

In the United States, the greatest problem with the regulatory agencies has been industry 'capture' (Englehart and Trebilcock, 1981; Doern, 1978; and Reagan, 1987). 'Capture' implies that "regulatory measures were enacted and implemented in the interests of specialist producer groups" (Peacock et al., 1984, p. 15). In order to achieve directed regulation, the agencies would employ individuals sympathetic to the industry and the firms would hire ex-agency members.

In Canada, the effect of capture was lessened due to public sector appointments to positions (Englehart and Trebilcock, 1981). Doern (1978) stated that the Boards are or will likely be captives of the interests they regulate regardless of attempts to separate themselves from the industries. In addition to agency capture, agency employees could also be equally captured by personal bias. This personal bias may not be easily distinguishable from agency capture. Industry despite the advantages of capture has, to an extent, become aware of the ethical problems associated with agency capture. Some organizations within the industry may have instituted standards and behaviors which could deter agency capture.

2.4.2.2 Degree of Agency Independence

Regulation is carried out through a wide range of institutional arrangements such as Boards, Commissions, Tribunals, and other quasi-judicial agencies. These institutions have varied degrees of autonomy within the Canadian federal and provincial

governments. The statutory regulatory agencies may possess a great deal of autonomy from executive departments but not absolute independence from the government (Economic Council of Canada, 1979 and Englehart and Trebilcock, 1981). The independence of the regulatory agency has been noted to be greater when senior Board members are appointed for a fixed term with the option of removal "for cause" and when adjudicative and other decisions maintain a system of no appeal or only a limited right of appeal (Economic Council of Canada, 1979).

Some regulatory agencies within Canada were designated to have detached full-time professionalism. However, this detachment may never be fully achieved as the government has been unwilling to allow the final decision-making authority to be in the possession of a non-elected body (Economic Council of Canada, 1979); while others maintain complete detachment in decision-making. Another mechanism for control of regulatory agencies was greater ministerial control in order to ensure responsibility and accountability in the same manner that public servants in executive departments were accountable to their ministers and the legislature (Economic Council of Canada, 1979).

2.4.2.3 Roles and Use of Regulatory Agencies

Delegation of policy making roles to an agency can occur provided its legislative mandate has broad discretion and the government has not clearly articulated its policy positions. This additional role should not be considered as an abdication of ministerial or cabinet control over policy-making (Economic Council of Canada (1979). In order to

effectively delegate authority, the Economic Council of Canada suggested that two different types of regulatory agencies be developed, each with a specific purpose: 1) advisory statutory regulatory agencies and 2) decision-making statutory regulatory agencies. The advisory agencies would have the capacity to advise on policy with no adjudicative privileges while, the decision-making agencies would be solely responsible for adjudicative functions. These two distinctions would clarify for the government, the agency, the regulated, and the public the identity of the policy-making and decision-making authorities. However, some regulatory agencies effectively espouse both advisory and decision-making statutory functions within one organization.

According to Brown-John (1979) the use of advisory agencies can be viewed from four perspectives:

> First, they may be viewed as another means of winning group consent (accommodation) for preconceived policy and administrative decisions in advance; a 'rubber stamp.' Secondly, they may be viewed as a mode of facilitating high-intensity interest group participation and even determination of policy, thereby stemming and avoiding prospective political controversy under the guise of administrative action.[9] Thirdly, they may be viewed as a means of seeking informed opinion and reaction before issues become public and politically explosive.... Or fourthly, they can be viewed as incorporating something of all of the above. (p. 76)

Regulatory agencies can also generally employ an open decision-making procedure which employs public hearings and renders reasoned decisions developed though the hearing (Economic Council of Canada, 1979 and Doern, 1978). These agencies were

created to secure institutional flexibility while blending adjudicative, research, advisory, legislative, and administrative functions.

2.5. Public Participation in Regulation

Public participation has been used in the regulatory process since the inception of a regulatory system in Canada. The impetus for continued and currently increasing involvement by the public has come from both the government and agencies, and from the public itself.

Public participation developed "out of a sense of alienation and powerlessness generated by the increasing complexity and remoteness of government, the scale and pace of technological change, and the failure to control its human impacts" (Sadler, 1979, p.8). The public dealing with agencies are often comprised of individuals who, directly or indirectly, seek to influence the agency's policies because they feel affected by them (Sabatier, 1977). Sabatier noted that it is useful to distinguish between "a) organized interest groups, b) unorganized individuals who nevertheless take an interest in the agency and occasionally attempt to influence its policies, and c) individuals who do not realize that they are affected by an agency's policies" (p. 443).

Effective policy-making also requires balanced representation, in the decision-making process, from legislators, civil servants, and the public (Englehart and Trebilcock, 1981). In order to maintain a balance, interest groups, producer's associations, and other

professional lobbyists often exist to provide politicians with another perspective as the politicians have incomplete information about the effectiveness of various policies and regulations which have been enacted to meet previously raised demands (Treasury Board Secretariat, 1993)

Some regulations state that the regulatory Acts are in the interest of the public, as are rulings and decisions determined under them (Hartle, 1979). Hartle (1979) stated that: "The public interest is what the government of the day, through its ministers and appointed departmental - agency officials, decide" (P.39). The accountability of administrators for their "public interest" activities has increased as acknowledgment that the public has an role in policy development grew (Brown-John, 1979).

In addition to statements of public interest, all levels of Canadian governments have instigated more opportunities for public participation in legislative and administrative processes. Brown-John (1979) presents three categories of techniques used to achieve the increased opportunities:

> 1) widespread employment of public hearings by legislative committees and ad hoc commissions, ... 2) the encouragement of less judicialized and, thus, more accessible public procedures by most federal and provincial regulatory agencies, ... 3) the creation of citizen advisory bodies, usually consisting of persons with a particular interest and expertise in a policy area and liasing directly with minister and/or senior public servants... (p. 73).

On the whole, public participation could be considered to be a voluntary act by the general public. These individuals or organizations should be involved in the decision-making process for any formulated project, program, or policy (Parenteau, 1988).

The involvement of the public and the presentation of their opinions relates to the generally transient attitudes on major issues which are, or should be, considered in government agendas (Sabatier, 1977). The issues brought forward change because the public attention on a particular issue often only remains prevalent for a few years. The extent and duration of the concerns raised depend on variables such as socio-economic culture and the perception of harmful conditions (Sabatier, 1977).

Initially, the public presented opinions and concerns through lobbying at final proposal stages; however, now the public is involved in many stages throughout the administrative and political process (Reagan, 1987, O'Riordan, 1976, and Sewell, 1971). Sewell considered involvement at the end of a process to be parternistic; while, in the middle ground position, public views are sought at various stages resulting in varying frequencies of involvement. The redistribution of power, throughout the process, allows individuals to be deliberately included in future decisions (Arnstein, 1969).

2.6. Evaluation of Regulation

Evaluation is a growing discipline which now extends into all facets of society (Guttentag and Saar, 1977). The growth in evaluation has allowed it to play a larger role

in orderly policy development and program implementation (Rossi, Freeman and Wright, 1979). The evaluation of regulation can be categorized under the auspices of policy evaluation. The growth in evaluation has also expanded the role of governments and groups, such as international organizations, into areas dealing with the improvement of the human condition (Freeman, 1977, and Weiss, 1972).

2.6.1 Evaluation Methodologies

A large number of methodologies exist and have been developed as different systems for understanding and classifying evaluations. Two of the main methodologies have been devised by Patton and Weiss. Patton (1978) was concerned with the utility and practicality of evaluation research. He suggests gathering data and then determining a pattern which evolves into the focus of a study. Weiss (1972), on the other hand, suggests that once an evaluation topic is selected, the purpose is to measure the effects of a program against the initial goals it set out to accomplish. Measurable criteria are developed based on the goals and the data are analyzed against the criteria. Regardless of the methodology espoused, an evaluation should entail the features of utility, feasibility, propriety, and accuracy (Stufflebeam, 1980).

As previously mentioned, no single classification scheme exists which describes all of the various models, the following examples show the variety of systems available. None of the classification systems are mutually exclusive. A committee of the National Academy of Science delineated nine different purposes of regulation. The purposes are:

1) needs assessment; 2) basic research; 3) small-scale testing; 4) field evaluation; 5) policy analysis; 6) fiscal accountability; 7) coverage accountability; 8) impact assessment; and 9) economic analysis (Raizen and Rossi, 1981). Patton (1978) on the other hand, lists six categories which were identified by the Evaluation Research Society Standards Committee (Figure 2). These categories of evaluation are determined by

Figure 2. Six Categories of Evaluation as Identified by the Evaluation Research Society Standards Committee.

(A) Front-end analysis (preinstallation, context, feasibility analysis). These types of evaluations take place prior to installation of a program to provide guidance in planning and implementing the program as well as deciding if the program should be implemented.

(B) Evaluability assessment: This type of evaluation work includes activities aimed at assessing the feasibility of various evaluation approaches and methods. The scope of the evaluation, technical matters, design limitations, and cost parameters are established through Evaluability assessment prior to undertaking a more formal evaluation, especially a causal evaluation of program outcomes.

(C) Formative evaluation (developmental, process): These evaluations are aimed at providing information for program improvement, modification, and management.

(D) Impact evaluation (Sumative, outcome, effectiveness): These evaluations are aimed at determining program results and effects, especially for the purposes of making major decisions about program continuation, expansion, reduction, and funding.

(E) Program monitoring: The ERS (1980:7) statement says that "this is the least acknowledged but probably most practical category of evaluation. ... The kinds of activities involved in these evaluations vary widely from periodic checks of compliance with policy to relatively straightforward 'tracking' of services delivered and 'counting' of clients."

(F) Evaluation of evaluation: (secondary evaluation, meta-evaluation, evaluation audit). This category includes professional critiques of evaluation reports, reanalyzes of data, and external reviews of internal evaluations.

Source: Patton, Michael Quinn, "Practical Evaluation" (Sage Publications, Inc., Beverly Hills, California, 1982) p. 44.

evaluation efforts and by the kinds of activities that tend to be emphasized.

House (1978) developed a comprehensive taxonomy of major evaluation models. He identifies eight categories which could be distinguished by their audience, by which assumption of consensus is made, by the outcomes examined, by the questions asked, and by the methods used (Patton, 1978). The eight categories are: 1) systems analysis; 2) behavioral objectives approach; 3) goal-free evaluation; 4) art criticism approach; 5) accreditation model; 6) adversary approach; 7) transaction approach; and 8) decision-making models.

2.6.2 Role of Evaluation Research

"Evaluation research is the systematic collection of information about the activities and outcomes of actual programs in order for interested parties to make judgments about specific aspects of what the program is doing and affecting" (Patton, 1978, p. 26). These interested persons are often the decision-makers and managers who use evaluation to produce objective evidence about a program (National Energy Board, 1988). In this context, methodologies have been developed which allow evaluation to incorporate political realities and integrate the changing outlook and conflicting goals of various groups within society (Guttentag and Saar, 1977).

The researchers have a complex role to play. They conduct evaluations which "are being used to assess the impact of public programs in many social, economic, psychological, and political aspects of our lives. The federal emphasis on zero-based budgeting and on accountability have accelerated policy-makers' reliance on evaluation" (Guttentag and Saar, 1977, p.11).

As evaluation is the study of process and impact, the results of evaluations can be useful almost everywhere in the decision-making process. Therefore, evaluation is one component of information which fosters the slow evolutionary process of programs and policies (Patton, 1978).

2.7. Conclusion

Regulation is a governing instrument which has been used to maintain public control of private sector activity. The IDP process, a combination of economic and social regulation, was introduced in 1974 when economic regulation was the primary method of regulating industry. The regulation would enable the EUB to maintain policing activity, in terms of regulating energy use and facility citing, while promoting the social perspective through encouraging public participation, mediating social and environmental concerns, and maintaining resource sustainability.

In order to ensure that the IDP process continued to meet its regulatory requirements and was able to adapt, if necessary, to the future needs of the stakeholders,

an evaluation of the regulatory agency, relevant government departmental, affected chemical company, and relevant interest group satisfaction of the process was conducted. As the methodologies outlined by Patton and Weiss have practicality and comparability as their respective strengths, the methodology considered most useful in conducting the IDP evaluation was an adaptation of the two methodologies. The coordination of the methodologies enabled the researcher to select the more desirable aspects of both evaluation techniques and implement them in the IDP process evaluation. A detailed description of the methodology of the evaluation is presented in Chapter IV.

CHAPTER III - INDUSTRIAL DEVELOPMENT PERMIT PROCESS BACKGROUND

3.1. Introduction

In order to further understand the context of the Industrial Development Permit regulatory process, a detailed description of the development of the IDP process in Alberta within the context of change will be reviewed. Background on the IDP permit and its processes will be discussed in terms of the surrounding framework of policies and program alterations, the factors leading up to regulation, and the evolution of the process. Other relevant Acts, in addition to the Oil and Gas Conservation Act, to which the Industrial Development Permits apply will be presented. A comprehensive description of the permit process, as identified in 1995, will be presented following the background information. The next section will discuss the coordination of the IDP process with other regulatory processes in the larger provincial regulatory system. The coordination will be discussed in terms of the interaction which exists between AEP's Environmental Impact Assessments and the IDP.

3.2. The Evolution of the Industrial Development Permit Process

The abundance and availability of hydrocarbon resources, in Alberta, for use as feedstock and fuel has been the attraction for petrochemical development projects since the major oil discovery at Leduc in the late 1940s (Dmytruk, 1995, personal communication). The integral role which the industry plays in the Alberta economy was recognized by the Alberta government, particularly as it related to industrial

diversification. The need for a policy or permitting system which would regulate industrial energy use, facility siting, social and economic impacts, and environmental concerns was brought about by interest in the economic viability of the industry, concern over future availability of hydrocarbon resources, and desire to maximize the benefits of projects to Albertans.

3.2.1. The Surrounding Framework of Policies and Programs

National and international events affected the development of the industry in Alberta because of the petrochemical industry's global nature. Two factors that dominated the Alberta activity in the 1970s and 80s were: 1) the National Oil Policy (NOP) in 1961 and 2) the increases in international oil prices. The NOP reallocated the distribution of oil within Canada, and the perceived world oil shortage was due to price control by the Arab states.

The NOP divided Canada into two segments along the Ottawa river. The western segment was supplied with crude oil from domestic sources and the eastern segment, eastern Ontario, Quebec, and the Maritimes, was dependent on imported oil (Chapman, 1985). Due to complex economic and political reasons and the association with United States oil companies, Alberta crude became more expensive than the imported oil from the Middle East (Shaffer, 1983).

In 1973-74, large increases in the international oil prices and a second increase in 1979 significantly affected global petrochemical production costs. Alberta petrochemical development due to the internal supply of crude oil would not have been impacted to the same extent as global development. For example, " UNIDO (1978), p. 57 estimated that the variable costs of energy and feedstock increased from 44 per cent of the total cost of producing ethylene from a 300 000 tons per year unit in 1972 to 73 per cent by 1978" (Chapman, 1985, p. 139).

The Canadian situation was affected by the escalation of international oil prices. By the early 1980s, the international oil price escalated to where it was more than double the price of domestic oil. The old two-price system was then replaced by a single Canadian price which remained below the original price. This single pricing system, as explained in Chapman (1985), was reinforced by the National Energy Program (NEP) which stated "... that the price of Canadian oil will not be linked to world prices" (Energy Mines and Resources, 1980, p. 27). Another objective of the NEP was to ensure that gas prices rose "less quickly than oil prices in order to encourage a shift away from oil to natural gas" (Energy Mines and Resources, 1990, p.31). The Canadian gas price relative to oil price made gas an attractive raw material for petrochemicals. This advantage encouraged the use of natural gas as both a fuel and a raw material in the petrochemical industry.

3.2.2. Factors Leading to Regulation of Energy Raw Materials used by the Petrochemical Industry

Given the large surplus of energy, various representatives of the Alberta government promoted the development of the petrochemical industry in Alberta (Chapman, 1985). This commitment was outlined as economic objectives by Premier Lougheed in 1974. The primary objective was to "...Diversify and become less dependent upon the sale of unprocessed resources" (Alberta Hansard, 1974c, p. 3132). Other supplementary objectives included distributing industrial growth throughout the province, strengthening small and locally controlled businesses, upgrading skills of Albertans, increasing participation in the benefits of industrial growth, and capitalizing on Alberta's natural advantage (Doty, 1985). This was suggested because Alberta's abundance of hydrocarbon resources lead to an increased interest in Alberta as a location for a petrochemical industry.

An increase in industrial expansion would lead to a greater quantity of hydrocarbons, particularly natural gas, processed within Alberta. Due to the increased interest in Alberta as a site for development and the potential shortage in the use of pentane plus, the provincial government decided to institute a policy or regulatory process which would allow them to have input into industrial development.

3.2.3. Industrial Development Permit Policy Evolution

In the early 1970's, the Alberta government decided that a strategy had to be developed which could deal with the anticipated influx of the new development because Alberta had no specific legislation dealing with evaluation and approval of petrochemical facility development. The Department of Industry and Commerce, currently called the Department of Economic Development and Tourism, proceeded to consider a system of permits for new industrial developments in the changing industrial climate of 1974. The Department of Industry and Commerce, Economic Development Division, put forward an internal proposal for an Industrial Hydrocarbon Policy (Department of Industry and Commerce, 1974). The proposed policy intended to achieve the optimal distribution and utilization of existing and undiscovered hydrocarbon reserves for uses which were consistent with the aforementioned economic development objectives. The policy proposed that Alberta "a) expands the Alberta Government's regulatory powers to directly affect supply for industrial purposes to firms within the province, by requiring that they obtain development permits; and b) indirectly affects price through the provision of selective rebates" (Department of Industry and Commerce, 1974, p.1.). Therefore, it was suggested that controlled development of the industry for major projects, which used non-renewable resources in Alberta would be desirable. The major projects were defined as "those consuming in the order of 1 billion cubic feet of natural gas per year" (Department of Industry and Commerce, 1974).

Under this proposal, the supply of the hydrocarbon reserves was to continue to be controlled by and regulated for domestic and export use by the ERCB for the assurance of a long-term supply of hydrocarbon feedstocks. This supply would be assured by including industrial hydrocarbon requirements in the total requirements prior to approving any gas removal permits.

In the initial proposed Industrial Hydrocarbon Policy, the major hydrocarbon consuming industries were to be required to submit an application to a proposed new board, the Industrial Hydrocarbon Review Board (IHRD), which would issue the permit. However, in the subsequent IDPs, the duties of the IHRD were placed under the jurisdiction of the ERCB because it was an independent and respected quasi-judicial agency and was seen as the logical agency to hold hearings. Thus, this initial proposed Industrial Hydrocarbon Policy lay the groundwork for the development of legislative changes to the Oil and Gas Conservation Act which would introduce the requirement of permits for new industrial development in Alberta.

In 1972, the Alberta Government commenced a review of existing policies regarding the export of natural gas (Alberta Government, 1972). The ERCB was requested to conduct a hearing on the matter of field pricing of natural gas, particularly from the public interest point of view. Thus, due to the pending review of existing policies, the Alberta Cabinet held in abeyance the approval of all outstanding permits for

increased removal of natural gas from the province (Alberta Government, 1972). The hearings were completed in September 1972.

The ERCB reached two main conclusions. The first conclusion was that there were sufficient reserves of natural gas in Alberta which must be used and sold at a competitive price in the public's interest and the second conclusion was the implementation of a two-price system for natural gas in Alberta. These conclusion prompted interest from the chemical industry because Alberta offered the lowest fuel costs in Canada, Albertans would receive a fair price for natural gas taken out of the Province, Alberta's economy would be more competitive, and prospects of finding new reserves were improved (Alberta Government, 1972). Ultimately, the companies could perceive Alberta as a favorable environment for development.

In June 1974, the hearing, pertaining to Alberta's long-term requirements of energy and energy resources, was reopened and dealt with that areas related to Alberta's industrial gas requirements (Govier et al., 1974). The purpose of the hearing was to establish requirements on Alberta's energy and energy resources for the years 1974 to 2004 with regards to: "a) any matters affecting future Alberta requirements of energy or energy resources, and b) Alberta's future industrial requirements for natural gas and propane" (Govier et al., 1974). In order to present the requirements, the ERCB used evidence gathered at the original 1972 hearing with the addition of petrochemical development and associated resource requirements provided by the 1974 hearing and

other available sources (ERCB, 1975). Based on the findings, the ERCB proceeded to forecast the energy requirements and use for the following 30-year period.

The issue of petrochemical development in Alberta was once again brought into debate in the Legislature. On April 19, 1974, the Premier confirmed that the government was considering a system of permits for new industrial developments, especially in the field of natural resources, which would have to be attained prior to construction (Alberta Hansard, 1974a).

Establishing a system of industrial development permits was to be done via an amendment to the Oil and Gas Conservation Act. The amendment was "designed to assure maximum utilization by industry located in Alberta of Alberta natural gas resources and the orderly and planned development of major industries that are developed through the processing of those natural resources" (Albert Hansard, 1974b, p. 2828). The permitting system would bring order, in the public's best interest, to the large number of proposed industrial projects, which were expected to move on-stream. Some of the projects being considered were: 19 fertilizer plants and four methanol plants (Alberta Hansard, 1974b).

The amendment would also allow for the expansion of the industrial sector of the economy to include further processing of raw materials and increasing the manufacturing in secondary and tertiary industries. When the subject of industry expansion was

introduced in the Legislature, the following points were given as benefits of the amendment: "to undertake an integrated development approach to primary industries; to increase the processing of natural resources and maximize the returns from them; to develop efficient and internationally competitive processing and manufacturing industries...; to achieve maximum attainable employment, to provide greater domestic control over those resources and to improve our income and our opportunities through balanced regional development" (Alberta Hansard, 1974b, p. 2828).

On June 6, 1974, the Oil and Gas Conservation Amendment Act was passed. This Act outlined the preliminary criteria to be used in the granting of permits. In accordance with Section 30, it required that no gas or gas product produced in Alberta shall be used in Alberta, as a raw material or fuel, in any industrial or manufacturing operation, such as the production of carbon black, ammonia, urea, ethanol, methanol, or other petrochemical products, unless the ERCB, granted a permit that was authorized by the Lieutenant Governor in Council (ERCB, 1974). Likewise, the Act specified in Section 30, that the ERCB shall not grant the permit unless, in its opinion, it is in the public's interest to do so having regard to 1) the efficient use, without waste, of energy resources and 2) the present and future availability of hydrocarbons in Alberta. (Govier et al., 1974).

The Oil and Gas Conservation Act stated that the permit granted would be called an Industrial Development Permit (IDP). Industrial development projects, from 1974 onward, were subject to permit requirements, in order to establish the appropriate use of

energy resources as raw materials and fuel in Alberta and to maintain effective resource management (Govier et al., 1974). However, facilities, which were in operation during the 1974 amendment, were exempt to the permit. The exemption remained valid provided that the facilities did not expand and production of products, regulated in the permit, did not exceed the rate of production of the twelve-month period ending in April 30, 1974 (ERCB, 1974). Likewise, permits for new facilities or expansions were not required as long as the construction had commenced on or before May 16th, 1974. For the purposes of record keeping, the exempt and expanding facilities and those under construction had to report to the Board identifying the facilities by location and ownership, by brief description, and by listing relevant rates of production.

The companies subject to the legislation are granted permits for a 15- to 20-year period. These permits are given to projects that use energy resources as raw materials and fuel above a specified quantity of energy use which is determined from the Act (Govier et al, 1974). The granting period, in light of future public interest, was instituted due to the recognition that although resource use for the province was to be determined for the 30-year period following 1974, resource companies did not look much more than 10 years ahead in their operations projections. This granting period kept the long range implications of resource use and availability in perspective (Govier et al., 1974).

In 1976, the permit requirements were extended to include "condensate, crude oil, crude bitumen, or synthetic crude or any primary derivative of them [as] used as a raw

material or fuel in any industrial or manufacturing operation" (ERCB, 1977, p. 2). Therefore, the definition of any industrial operation was extended to include, but not be limited to, refineries, pulp and paper mills, and cement plants because they utilize hydrocarbons as raw materials and as fuel.

Beyond the 1970s, few alterations have been made procedurally to the IDPs; however, methods were being sought to decrease the process complexity and to evaluate the need for such permits. For the purposes of proponent clarification during applications, the ERCB assembled a Guide G-25 Industrial Development Permit Application Guide to Content in order to respond to anticipated 'mega-project' inquiries by delineating the informational content required in permit applications.

Continued success in finding hydrocarbon reserves quelled the previous concerns of the early 1970s of the availability of future supply. The lack of shortages brought into question one of the foundations upon which the IDPs were developed. In the late 1980s, the necessity of reviewing of the need for IDPs was becoming prevalent primarily because of the recognition of increasing hydrocarbon surpluses and the increasing public concerns about environmental issues (ERCB, 1984 and ERCB, 1989). The need for the IDPs was discussed between cabinet ministers and EUB and/or ED and T staff as to whether the procedure should be amended or repealed, and to identify the proper method for coping with potential future difficulties. These discussions focused on future allocation of the resources, protection of the supply of fuel and feedstock for permit

holders, and allowing both the public and industry competitors to object to or support IDP applications for industrial resource use. The public raised concerns dealing primarily with environmental issues and the competitors were concerned about the allocation of ethylene and potential monopoly situations.

The public tended to focus on concerns such as facility location, land use, and environmental impacts which were the subject of the ERCB permit application hearings (ERCB, 1984). With respect to the concerns identified, companies were required to meet the environmental and construction standards outlined in other relevant permits and legislation, such as Municipal permits, Environmental Impact Assessments (EIAs), and the Alberta Environmental Protection and Enhancement Act (AEPEA).

The discussions about streamlining, increasing the efficiency of the IDP process, and possibly eliminating some steps in the approval process, continued. For example, in 1989, a suggestion was made by the then Minister of Economic Development and Trade to reduce the number of Order-in-Councils (O.C.) to be granted to one per proponent (ED and T, 1989). This request of reducing the number of O.C.s was not considered practical by the Board. The method suggested for streamlining the process for Cabinet would be to group and send related responses to one liaison individual. This proposed solution was accepted as a means to attempt to reduce administrative problems and company delays (ERCB, 1989).

More recently, the Klein government in Alberta has launched a general review of all Acts and regulations. This review has again prompted a review of IDP legislation. The EUB and the government have been examining methods of increasing administrative coordination within the government, and simplifying the process for the applicants. Another move toward streamlining has led to the transfer of the Ministerial authority for the permit from ED and T to Energy in 1996, with ED and T retaining input into the application.

3.2.4. Other Relevant Acts and Regulations

In addition to the Oil and Gas Conservation Act, two other Acts stated requirements for the completion of an IDP. These Acts were: 1) the Coal Conservation Act and 2) the Oil Sands Conservation Act. In legislative form and in process, the Acts were amended to insert clauses pertaining to the IDP. The Coal Conservation Act was amended, in 1975, to include provisions wherein an IDP was to be issued for the use of coal or a coal derived product as a raw material, fuel, or reductant in an industrial or manufacturing operation because initially the IDP was legislated for oil and gas only (ERCB, 1977). Under the amended legislation, power plants regulated under the Hydro and Electric Energy Act and those facilities where the quantity of coal did not exceed 227,000 tonnes were not subject to the IDP requirement. However, it must be noted that, to date, there have been no IDP's issued under the Authority of the Coal Conservation Act.

The ERCB, in 1980, required the submission of an "Industrial and Manufacturing Operations Statement" from the exempt, non-exempt, new, and coal and coal product facilities which were not listed in 1979 (ERCB, 1980a). However, coal and coal products facilities which were authorized to use an alternate form of reporting and oil sands plants were not stipulated to submit the aforementioned statement.

The Oil Sands Conservation Act was amended in 1994. The Act allows for the granting of permits for "the use of crude bitumen, derivatives of crude bitumen, declared oil sands or oil sands products proposed in the application, subject to the terms and conditions that is prescribed in the permit," (OSCA, 1995).

3.2.5. Previous Studies of the IDP Process

Further examination of the IDP application process and associated requirements from an internal perspective was undertaken by the ERCB in 1992, as part of its internal quality management initiative, to review a number of core processes known within the ERCB as Quality, Management, and Service (QMAS) (ERCB, 1992). The concerns and issues presented in the evaluation were very similar to those raised in the 1980s, and several recommendations were derived. For example, it was suggested that the requirement for an EIA could be a trigger in determining the level of extensive information required of a company. If an EIA was not needed, information requested relevant to the decisions would be submitted by the company and the complexity of the IDP application would be reduced. For new and large scale projects requiring an EIA,

more detailed information would be required. These recommendations are under active review in the regulatory review of the EUB legislation (Mink, 1996, personal communication).

The Canadian Chemical Producer's Association (CCPA), at the request of the ERCB, submitted its views regarding IDPs (CCPA, 1993). In its submission, the CCPA provided many recommendations towards a process which it believed would provide better coordination between the applicant company and the regulatory bodies, follow on a more timely basis than the current process, and allow for consistent, high-quality, and complete applications. A further suggestion was that applications should be classified into major and minor projects with a coordinated effort by government departments to reduce duplication within all approvals required by a particular facility. The two-tiered classification would then be the basis for the degree of information required by the two levels.

While the ERCB intends to officially implement procedural changes, they are following the intent of the QMAS recommendations by requiring information proportionate to the complexity of the application or project. At this time, the policy related to IDPs as substantiated by the Oil and Gas Conservation and the Oil Sands Conservation Acts remain fundamentally unchanged. This was exemplified by the fact that the permit requirements were still determined on the basis of hydrocarbon usage within the province of Alberta.

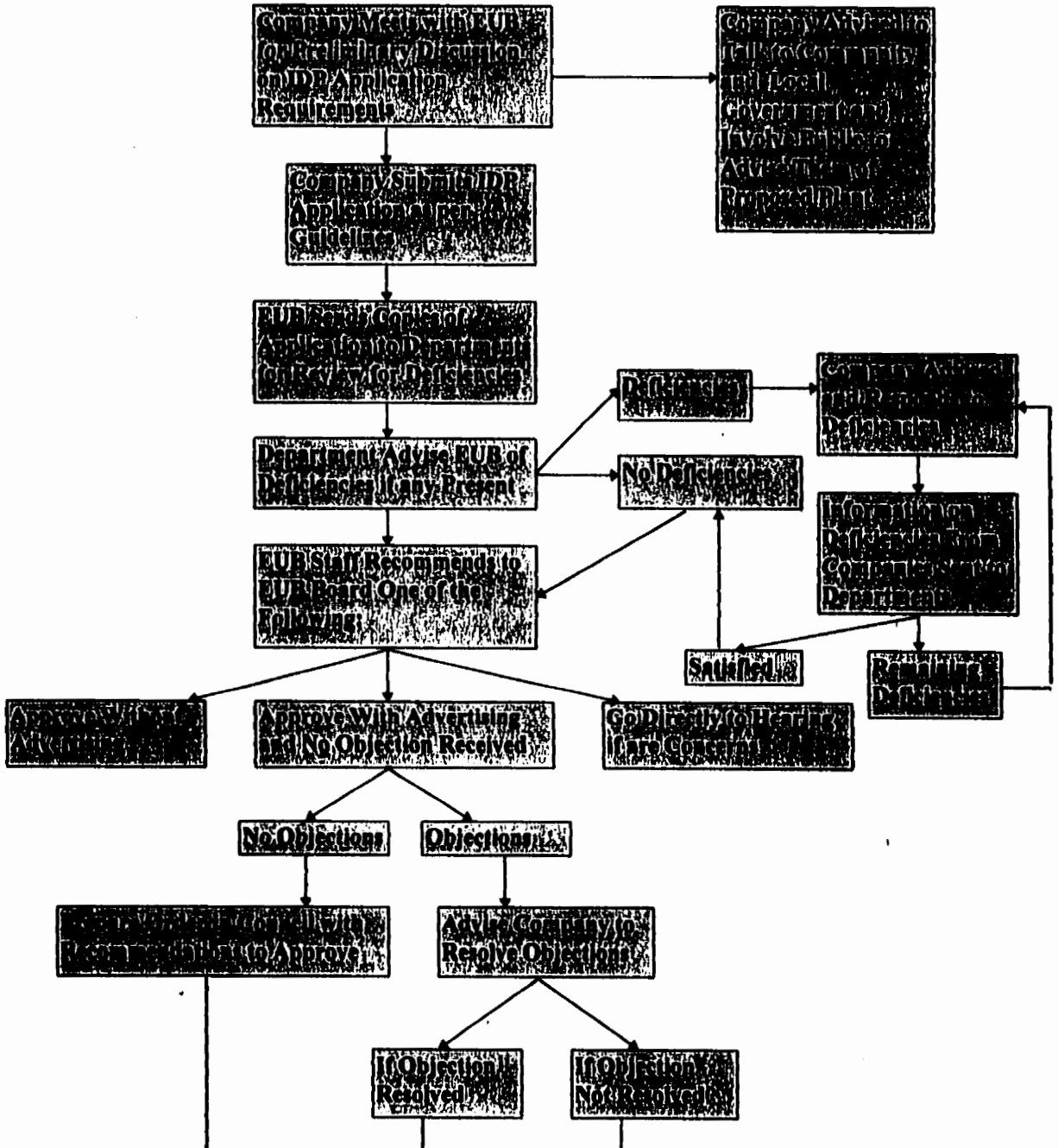
In 1994, the ERCB was amalgamated with the Public Utilities Board, in response to government initiated downsizing, to form the Alberta Energy and Utilities Board (EUB). Therefore, in any subsequent references, the ERCB will be referred to as the EUB.

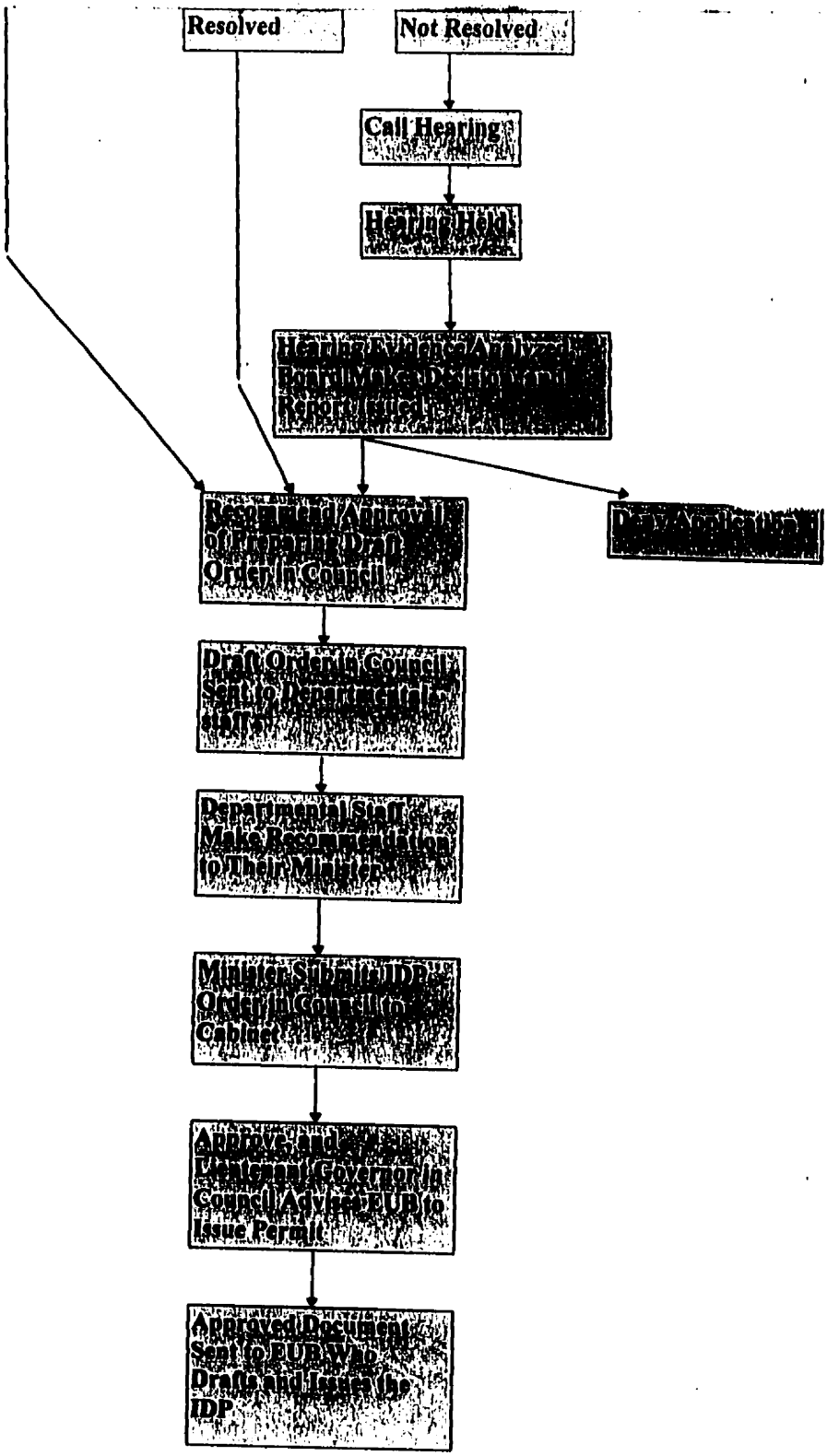
3.3. A General Description of the Industrial Development Permit Process

The process the EUB has adopted for the IDP applications is one which is generic to all processes the Board administers. As ascertained primarily through conversations with MacDonald (1995) and Dmytruk (1994), the following is a description of the IDP process currently in use by the proponents of chemical projects in Alberta (Figure 3).

A company with a prospective project was informed of the IDP process when it approached the EUB, ED and T, and/or AEP about the project. At this time, the company was advised to prepare an application for an industrial development permit for its specific project. At the preliminary meeting, the EUB advised the company that it is in its best interest to inform the affected communities about its proposed project by advising the affected community(ies) through activities such as newsletters, newspaper advertising, one-on-one meetings with neighbours, and holding open houses as information sessions. These methods were suggested in order to inform the company of any public concerns at an early stage so that the concerns may be addressed in project design and development. The project proponent was also reminded of other assessments and permit applications

Figure 3. Flowchart Illustrating Process Steps of the Industrial Development Permit




Resolved
Not Resolved
Call Hearing
Hearing Held
Recommend Approval of Preparing Draft Order in Council
Draft Order in Council Sent to Department(s) Staff
Department Staff Make Recommendation to Their Minister
Minister Submits IDP Order in Council to Cabinet
Approved and Lieutenant Governor in Council Advises EUB to Issue Permit
Approved Document Sent to EUB Who Drafts and Issues the IDP

of which they needed to be aware, such as an Environmental Impact Assessment (EIA) and other related provincial and municipal permits.

As part of the IDP application, the EUB required from the company, information pertaining to the project description, technical, biophysical, social, and economic information, such as process details, raw materials and fuels, resource upgrading, employment, economic viability and financing, and environmental impact and zoning authorizations (ERCB, 1974), as outlined in the EUB's Guide G-25, Industrial Development Permit Application Guide to Content (ERCB, 1981). Twelve copies of the application and other relevant information are initially filed at the EUB office in Calgary, Alberta (ERCB, 1974).

Once the EUB receives the application, it forwarded copies to the Departments of ED and T, Energy, and AEP for assessment of completeness. The government departments reviewed the application for any deficiencies in content. Any deficiencies noted were sent to the EUB, who, in turn, compiled the departmental comments with its own deficiency comments into one letter and sends it to the company. Once the company has adequately responded to the deficiencies, the EUB staff deem the application to be complete. The EUB staff then make a recommendation to the Board on the disposition of the application.

According to Section 29 of the Energy Resources Conservation Act, the Board is required to assure that any person that may be directly or adversely affected, the opportunity to receive a notice of application, and to have a reasonable opportunity to acquire facts, to furnish evidence, to cross-examine and to be cross-examined, and to make representations by way of argument to the Board before it reaches its decision on the application. The notice of hearing would be advertised by the Board for a period of time which must be a minimum of 10 working days. However, if the process was to proceed jointly with AEP, the notice period was designated to be calendar 30 days, as outlined in the AEPEA legislation. If relevant objections were received and cannot be settled through negotiations between the concerned party and the company, then a hearing would be convened and usually held in the community where the facility was to be located. The EUB, in consultation with the affected parties, would select a hearing date and place and a notice of hearing would be issued. Copies of interventions to the application would be distributed to the EUB and the applicant so that everyone was aware of the issues. During the hearing, all parties would have the opportunity to cross-examine the applicant as well as provide their argument and evidence, where available, and in turn be cross-examined. All interested parties would have to opportunity to give closing remarks.

After the hearing, the EUB evaluated the evidence presented by the applicant and the interveners, reached a decision on the application, and prepared a written report. A draft permit and draft O.C. was prepared by the EUB stating the project requirements.

This package was forwarded to the appropriate Minister's office for submission to Cabinet. The Lieutenant Governor in Council considered the request, and if approved the document was signed by the Premier. The EUB received the signed document and then issued the permit in final form, with the necessary conditions, to the company.

The IDP process, as it is currently exists, allows for an orderly development approval process and regulated allocation of natural resources because of its cooperative nature between the companies, the government, and the public.

3.4. Coordination of the Industrial Development Permit process with Environmental Impact Assessments

The efficient integration of the IDP and AEPEA permitting processes has been timely in the context of the 1990s government's move towards deregulation. The coordination of the EIA and IDP processes has continued to evolve since the institution of IDPs.

Consideration of environmental effects are a part of the EUB mandate. Accordingly, sufficient environmental data must be filed in the application to allow the Board to reach its decision on the application under the IDP process (MacDonald, 1996, personal communication). Similar information was necessary for an EIA to meet the requirements under AEPEA (Mink, 1996). As a consequence, the EUB and AEP agreed at an early stage that any EIA would become part of any application to the Board. The

coordination was put into practice by integrating economic decisions and environmental protection early in the project planning stage (Environmental Protection, 1993). The integration of the two processes assured the same information would be used by the EUB as AEP used in considering its environmental permits. It also assured that only one public hearing was required for any one application.

3.4.1. Informational Coordination

AEP and the EUB coordinated their licensing and regulatory processes at an early stage in an attempt to reduce the duplication of information required in permit applications (George, 1995). The two parties outlined the types of energy project applications that would require an EIA, the general information required by project type, and the method by which the submissions would be handled (ERCB, 1980b). The informational coordination occurred throughout the process to ensure that all requirements were met by the participants. As an assurance of proper coordination, a consultative process between the EUB and AEP was arranged to review the application for completeness and deficiencies, and to coordinate timing of completion of both processes (ERCB, 1980b).

All major energy-related projects, which required submission of an IDP application, were considered by AEP and EUB to determine whether an EIA would be required (ERCB, 1980b). Should the Minister of Environmental Protection conclude that no EIA was required, the EUB would continue to request sufficient environmental

information, as part of the IDP application, to make its decision (Mink, 1997, personal communication). To ensure all necessary projects were permitted, AEP also has the responsibility to inform the EUB of all major energy projects which come to the department's attention.

The EIA would be sent to the EUB for comment before the EIA document was finalized. There have not been any irreconcilable differences between the parties at this stage; however, if the situation ever arose, the issues would be adjudicated by the EUB Chairman and the AEP Deputy Minister with further appeals having final decision by the AEP Minister (ERCB, 1980b). Similarly, the EUB provided notice of an IDP application to the government departments or agencies who have expressed an interest in the proposed project. The EIA would be subsequently submitted as part of the IDP application. As this information would be integral to the IDP, the IDP process can not proceed until an required EIA has been completed.

3.4.2. The Hearing Process

Once the Board concluded that the application was complete and legitimate public concerns about the proposal exist, a public hearing on the application was usually called. As specified in Section 2.1 of the Energy Resources Conservation Act, in addition to the other matters the Board may or must consider during a hearing, the Board must give consideration to whether the project is in the public's interest with respect to social and economic effects and the effects of the project on the environment.

A joint IDP and EIA hearing would be coordinated under the circumstances where the EUB and the AEP both require a hearing. As with the informational coordination, AEP and EUB staff coordinate potential hearing requirements in order to minimize process duplication and reduce approval time and cost incurred by the applicant. If a decision required that a hearing was held, it would be scheduled by the EUB in consultation with AEP and the interested parties. The IDP notice of the hearing would be also jointly coordinated by the EUB and AEP (MacDonald, 1995, personal communication). The questioning process to be used in the hearing were developed in concert by the two parties according to guidelines which would be relevant and pertinent to Energy Resource Conservation (ERC) and AEPEA legislation. All material presented in the IDP and the EIA would be available for perusal and questioning.

Following the conclusion of the hearing, a written EUB decision report would be issued as required by the EUB legislation (ERCB, 1980b). The process and the work required in formulating the report would be decided by the hearing panel and would be carries out by EUB staff. Upon completion and release of the EUB report, AEP considered the EUB report in reaching its decision on the project.

In the past, the selection of individuals on a hearing panel may extend to other government departments or agencies whose jurisdiction was involved in or affected by an application. Such matters are at the discretion of the EUB and would be determined on a

case by case basis. For example, in some projects, where the federal government has jurisdiction over the EIA, select individuals may be considered to either sit on the panel or provide information for the purpose of cross-examination and presentation (ERCB, 1980b and George, 1995). The Board has also provided the opportunity for other jurisdictions who perceive themselves affected to provide submissions; however, this requirement has not been invoked in the last 15 years.

3.5. Conclusion

The IDP process was implemented in 1974 when the government of Alberta noted an increased economic interest in Alberta's petrochemicals. A need to maintain the economic viability, the siting of facilities, future availability of natural resources, the presence of social impacts and environmental concerns, and public participation were the main concerns raised. Since the 1970s, the use of public participation throughout the process has increased and the process has evolved to coordinate with other permitting processes, such as AEP's EIA. In light of these changes, an evaluation of the IDP would be beneficial in order to provide assurance that the current process meets the needs of all parties involved during a period of intense scrutinization of regulation processes and other programs.

CHAPTER IV - RESEARCH METHODS

4.1 Introduction

The methods used to evaluate the IDP process will be described in this chapter. The research methods enabled data to be collected and recorded regarding government, agency, industry, and public satisfaction with the IDP process. The data provided a basis for comparing the process in place since 1974 with the stakeholder satisfaction of the efficiency and effectiveness with the regulatory process in 1995.

The research involved three stages of data collection. A literature review was conducted to gather information on relevant aspects of regulation and regulatory processes, and the IDP process. Prior to designing the data collection methodology, a file search was conducted to determine relevant individuals, to locate relevant permit information, and to tabulate the information extracted from files. Data collection was conducted using questionnaire and interview survey methods. Following the data collection, the data were analyzed following predetermined criteria. The synthesized data formed the basis for the conclusions.

4.2. IDP Process and Regulatory Literature Review

The literature review was conducted to obtain background on regulation and regulatory processes and the IDP process and was divided into two chapters. The first chapter consisted of a review of regulation and regulatory processes, a synopsis of the

function or governments and regulatory agencies in regulation, an explanation of the role of public participation in regulation, and an examination of evaluation research. The second chapter dealt with the evolution and a description of the components of the IDP process. In addition to the description of IDP components, a discussion of the coordination between the EIA and the IDP was presented due to overlapping procedural and content requirements of the two regulatory processes. The chapter also included a discussion of Acts and regulations, other than the Oil and Gas Conservation Act, which invoke the IDP process. The background information for the second chapter was obtained through conversations with the staff of the Departments of ED and T and AEP, the EUB, and from documents at the Department of ED and T and the EUB.

4.3. A File Search

A search of regulatory agency and governmental files provided data for data collection and analysis. The purpose of the file search was to record actual timeline data for the IDP process and permits issued to create a data base of IDP process statistics. The data was collected through the examination of chemical industry documents and publications at the Department of ED and T and the EUB. The file information was recorded according to the permit number assigned at the EUB. The files examined by the researcher were retrieved from current files and archives at ED and T and EUB. Files were examined for all 13 chemical companies involved in the research; however, some files were noted as incomplete.

The information to be collected in the file search was based on the description of the IDP process as described in Chapter III and through conversations with staff at the EUB. Information was gathered regarding permit types, products to be manufactured, and annual feedstock and fuel use to determine frequency of application as well as other statistics for specific permit types. Dates of the actual IDP process activities were recorded on the table. The dates recorded were translated into intervals from initiation of permit application to permit issuance. Where available, data on specific process activities were also collected (Figure 4).

4.4 Surveys

The evaluation of the satisfaction of the government, agencies, industry, and interest groups with the IDP process was accomplished using questionnaires or interviews. The chemical companies, the government departments, and the EUB were interviewed and provided comments on the entire IDP process; while, the interest groups were sent a questionnaire which requested responses that were limited to the public participation process associated with the IDP. The responses from the interviews and questionnaires were analyzed in terms of design and implementation of the process. The evaluation began in August, 1995 and was completed in April, 1996.

Figure 4. File Search Checklist

	Permit Application	Information
Application #		
IDP #		
Original IDP #		
Company		
Company name change (if applicable)		
Location		
Feedstock and fuel used		
Annual use		
Chemical Product type		
Annual production		
Type of permit Application		
Permit issuance date		
Permit expiry date		
Status of permit		
Initial date Application registered		
Referral for Advice to: EDT		
Energy		
EP		
AEUB Econ Dept.		
Advice received ?		
Deficiency material requested		
Deficiency material received		
Memo to AAG*/Dept. manager (who ??)		
To AEUB Legal for Advertising		
Last day for Objections		
# of Objections		
Memo to AAG for hearing		
To AEUB Legal for notice of hearing		
[Generic Notice of hearing] - if above categories do not apply		
Hearing date		
Last day for interventions		
Hearing report to AAG		
Report issued		
AEUB recommend forwarded to Govt. (O.C.)		
Order/Approval issued		
Number of interveners (total)		
Type of interveners: Other companies		
Interest Groups (NGO) and professional associations		
Local government		

Figure Continued. File Search Checklist

Individuals (private citizens)- Farmers, townspeople, etc.		
Method of Advertising: Newspapers (local and 'large')		
Community involvement		
Newsletters		
Informational Letters etc.		
Specification that other license or permit required such as EIA		
Appeals (if are any)		

*AAG = Applications Advisory Group (internal AEUB process of how application approved - consists of departmental managers)

**O.C./M.A. = Order in Council/Ministerial approval -M.A. not used except for gas plants

***cost of permit application not covered in the files

4.4.1 Survey Development

The program evaluation provides the tools to compare intended program outcomes with that which actually occurred. According to the operational evaluation methods presented by Carter and Wharf (1973) and Weiss (1972), in order to properly evaluate a program or process, the observable or outlined goals and objectives of the process must be determined and information on the covert goals and objectives of the process must also be obtained.

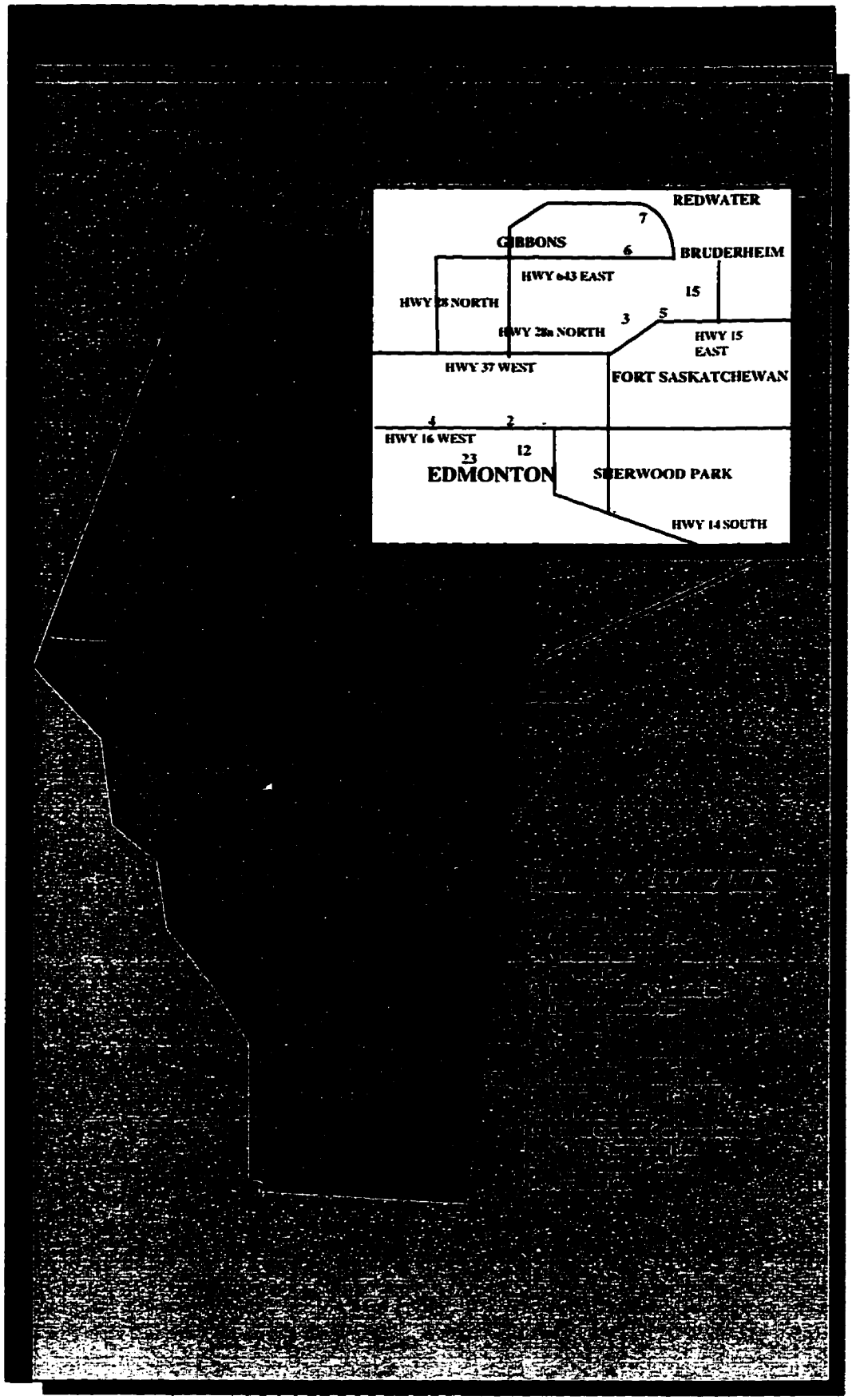
The determination of goals and process objectives for the IDP were determined in consultation with the relevant Alberta government departments, the EUB, and a number

of randomly selected companies. Based on these goals and objectives, evaluative criteria of the IDP process were established. The evaluative criteria were identified to be: 1) clarity of process; 2) relevancy of current legislation; 3) perception of public participation practices; 4) costs to the proponent to receive the permit and to the interested public to intervene; and 5) time commitment involved in application completion. The criteria were used as guidelines to formulate the surveys of the relevant government departments, the EUB, the chemical companies, and the relevant interest groups. The evaluation criteria were modified slightly for the purpose of classification, categorization, and interpretation of survey results.

4.4.2 Survey Sample Population Determination

4.4.2.1 Interview Sample Population

A total of 24 companies, in 27 locations, constituted all the permitted chemical companies which were active in 1995 (Map 1). The evaluation of the IDP process restricted the sample population to include only petrochemical and fertilizer facilities (Map 2). Refineries and pulp and paper mills were excluded from the study to allow for the comparison of companies with similar processes. As recorded in EUB files, in 1995, some of the companies maintained more than one existing permit per site. For ease of sampling, regardless of number of permits, each facility and its affected public was considered to be one unit.


REDWATER
7
GIBBONS
6
BRUDERHEIM
HWY 643 EAST
15
HWY 28 NORTH
3
5
HWY 28a NORTH
HWY 15
EAST
HWY 37 WEST
FORT SASKATCHEWAN
4
2
HWY 16 WEST
12
23
EDMONTON
SHERWOOD PARK
HWY 14 SOUTH

The individuals to be interviewed were selected through discussion with company, EUB, and government departmental staff to ensure that the people, who had expertise and experience in dealing with IDP permits, were interviewed. The number of interviewees selected were limited to 2-3 per company, department, or agency.

4.4.2.2 Questionnaire Sample Population

One of the requirements under an IDP is that the chemical companies are required to initiate public participation programs with members of the public adjacent to the site and in surrounding communities for the purpose of awareness about the project. The public was identified as neighbouring individuals, local communities, interest groups, and municipal officials.

Due to the size of the surrounding population, an alternative to a random sampling of the general population was selected. The alternative was to base the selection of organizations on two criteria. The criteria were: 1) the organization's name was mentioned in company, agency, or government literature and EUB IDP decision reports and/or 2) the Alberta Environmental Directory (1995) compiled and published by The Pembina Institute which listed land use issues as one of the issues of concern for the organization. Only the interest groups which were interested in land use issues and categorized as active in the region in which the chemical companies were located were involved in the study. One questionnaire was mailed out to one individual per organization.

4.4.2.3 Information Recall

The chemical companies, government departments, regulatory agency, and interest group respondents were selected based on current or previous involvement in or knowledge of the IDP process. As the IDP process is ongoing, a temporal range of experience was selected. Recent experience was beneficial because of the potential difficulty for respondents, with experiences of five years ago or greater, to recall the details of their involvement in the process. The respondents recently involved in the process can provide results which would be more relevant and advantageous in determining recommendations regarding the IDP process.

4.4.3. Personal Interviews

The personal interviews were conducted with individuals in chemical companies, EUB, and government departments who dealt with the IDP (Appendix C and D). The objective of the interviews was to obtain as much of the interviewee's perspective, as possible, on satisfaction with the IDP process and to provide an opportunity for the interviewees to give feedback to the EUB on possible operational changes.

The Departments of ED and T and AEP, the EUB, and the petrochemical companies were contacted by telephone in order to identify the appropriate individuals. Once these individuals were contacted and verbal consent for interview received, meeting times were suggested and agreed upon. The interviews were conducted primarily by

traveling to the organization's location; in a few instances when time or distance did not permit in person interviews, the contact was made by telephone.

The possible interview methods range from structured to unstructured interviews. The method selected for this study was described as a 'standardized open-ended interview' (Patton, 1987). For this type of interview, the exact wording and sequence of questions were determined prior to the interview. All respondents were asked identical questions in the same order. Patton (1987) identified several advantages in using this form of interviewing method. Some of the benefits were: increased comparability of responses because respondents answer the same questions; reduced interviewer effects and bias; data collected on the interview topics was complete for each person; decision-makers were able to examine and review the instruments used in the evaluation; and data organization and analysis was facilitated.

The interview format was carefully selected for wording and sentence structure in order to ensure the questions were clear and easy to understand. Patton (1987, p.123) suggested that "... good questions should, at a minimum, be open-minded, neutral, sensitive, and clear". Within the interview questions, every effort was made to formulate the questions in an objective and un-biased format.

The questions followed a fixed and logical sequence to assist the interviewee. Introductory questions were designated to elicit general opinions in order to enable the

interviewee to provide responses which were unaffected by any of the subsequent questions. The subsequent questions addressed the five different factors:

1) clarity of process for the users/administrators;

2) process relevancy to the needs of society;

3) value and extent of use of public involvement;

4) fees for and cost of completing the permit application/process and presenting interventions;

5) timeframe within which the IDP process operates.

The questions prepared for the interview were developed with information obtained from literature on questionnaire development and administration, and input from committee members, and from the CCPA. The interview questions were reviewed by selected industry representatives, government staff, committee members, and individuals external to the process to ensure that the questions posed were fair, representative, and met informational requirements. Open-ended questions were used to determine the perspective of the individual with regards to specific facets of the IDP process and to questions which required indication of choice from pre-determined answers or lists of information. The questions were a mixture of dichotomous ("yes"/"no") and open-ended questions.

The two similar forms of interview questions were developed. The content of the questions was essentially unaltered however, the wording was adapted to each group

surveyed. The first set of questions were developed to address the chemical companies perspective; and the second to correspond with the EUB and ED and T's activities. For example, question 5 under the Process Clarity section was different for each of the sets of questions as a standardized question would not have been applicable (Appendix C and D).

Question 1 in sections 5 and 6 in both sets of interview questions required more time than allotted for the interview (Appendix C and D). As most of the permits had been issues a minimum of 5 years prior to the interview, answering the questions required respondents to look back into their files to determine facts on the costs and permit preparation timelines. In order to accommodate this added time, the interviewee was provided with a stamped, self-addressed envelope for return of the information.

The interview was tape-recorded, with the permission of the interviewee, to ensure complete capture of information. During the course of the interview, any biases, on the part of the interviewee were recorded to assist in the interpretation of the data due to the subjective nature of interviews.

4.4.3.1. Letter of Consent

Prior to initiating the interview, the researcher presented the interviewee with a letter of consent which was drafted based upon LoBiondo-Wood and Haber (1986) (Appendix B). The letter of consent outlined:

1) the researcher's identity;

2) the purpose and components of the study;

3) the anticipated length of the interview;

4) the request for permission to tape record the interview;

5) the option not answer to all questions and withdrawal from the interview;

6) anonymity/confidentiality of the interview;

7) the use of research by the CCPA;

8) the option to obtain a copy of the finished report; and

9) methods of contact for further information.

Once the interviewee read and agreed to the conditions, the individual was asked to date and sign two copies of the document. The researcher witnessed the signing of the documents. One copy of the consent letter was left with the interviewee and the other was kept in the possession of the researcher.

4.4.4. Questionnaire

The questionnaire was designed to collect information on the perceptions and satisfaction of a sample of interest groups with respect to the clarity of the public participation process within the IDP, the amount of involvement of the public in the process, and other previously mentioned factors (Appendix E). The information gathered enabled the assessment of the public's perception towards the public participation in the

IDP process, the specific development project in their area, and the perception of the value of their input in the IDP hearings.

The survey format was selected because it best fit the sample size, location of the public, and time constraints. The topics covered in the questionnaire were first developed in a first draft which was tested and critiqued by the practicum committee members, and some members of the public. The testing was not as extensive as that which was used for personal interviews because the questionnaire questions were a modified version of the interview questions. The questions were tested for suitability for response by non-technical individuals.

Mail-out questionnaires were used despite the potential of a low response rate (approximately 30%) because it was necessary to target a wide-spread sample in a relatively short period of time. The questionnaire was mailed twice. The first round of the questionnaire was sent out with an accompanying cover letter which explained to the individual the purpose, nature of the research, and an assurance of anonymity and confidentiality (as outlined in section 4.4.4.1.1 and 4.4.4.2). Approximately two months later, a second questionnaire was sent, to all organizations, to serve as a reminder of the request of completion and return of the questionnaire. The follow-up letter restated the purpose of the research, reminded the individuals to complete the questionnaire or, if previously completed, to disregard the second mailing, and showed appreciation to the participant (as outlined in section 4.4.4.1.2 and 4.4.4.2).

4.4.4.1 Covering Letter Contents

4.4.4.1.1 First Mailing

The first questionnaire was the initial contact with the participant in a given community (Appendix B). The contents of the letter included the following, as outlined in Downey (1984):

1) identification of institution, researcher, and advisor(s);

2) identification of client(s) and/or sponsor;

3) purpose of the study;

4) questionnaire significance;

5) request to complete questionnaire and return;

6) confidentiality/anonymity;

7) availability of published document;

8) postage paid return envelope; and

9) statement of appreciation for participating.

4.4.4.1.2 Second Mailing

The second letter was sent to the organizations as a reminder of the request to complete the questionnaire (Appendix B). Another copy of the questionnaire was included and return requested. The letter included, as outlined in Downey (1984):

1) a brief reiteration of the purpose of the study;

2) a reminder of the request to complete the questionnaire;

3) statement of appreciation for participating;

4) thank you for those who have completed and returned the questionnaire and a statement to disregard the second copy if the first questionnaire was completed.

4.4.4.2. Questionnaire Content

The questionnaire was designed to contain mainly open-ended questions although some close-ended questions were also included. This mix of questions was selected to provide the respondents with ability to answer as honestly and concisely as possible. The length of time to complete the questionnaire was verified in a pre-test. Completion time was approximately 1 hour and 30 minutes. The categories of subject matter dealt with in the questionnaire were:

1) demographic information;

2) general comments about experience with IDP process;

3) perceptions of the clarity of the IDP process;

4) relevance of current method used in IDP process;

5) possible future changes to the process;

6) opinion on public participation in process;

7) opinion on costs incurred during the IDP process;

8) opinion about and the actual time required to complete IDP process.

The demographic information was located at the front of the questionnaire. The respondents were asked, at the end of the demographic information, to complete a

question which determined if the individual had participated in any IDP process. If the individual had not been involved in the process, a request was made to return the questionnaire incomplete to the researcher to increase the accuracy of tabulation of interest group involvement. Respondents who were involved in the process were encouraged to complete the questionnaire.

4.5.1 Data Coding

The responses from the questionnaires and interviews were analyzed separately. The same technique was used for the purposes of comparison in the discussion. The data were sorted into eight categories for further analysis:

1) implementation - public participation;

2) implementation - duplication;

3) implementation - cost;

4) implementation - time;

5) design - project planning process;

6) design - public participation;

7) design - informational requirements;

8) design - adaptability.

The first designation in a category determines whether the subject analyzed was considered to be an effect of process design or a result of the implementation. The second designation narrows the field of examination.

In determining the results, the responses in these categories were pooled from questions within the interview or questionnaire. The responses from the questionnaire and interviews were not pooled together.

4.5.2 Data Analysis

The data, in the eight categories, were analyzed using simple statistical techniques. The type of analysis was dependent on whether the question was of a qualitative or quantitative nature. The question was classified as quantitative if a tabular response was given, for example, "yes" or "no". These responses were summed by the researcher and presented as the overall response to particular questions. A qualitative question did not contain any pre-determined responses and the individual was able to comment on the question from a personal perspective.

Once all the responses were pooled from the interviews and questionnaires, the data from the questionnaires and the interviews were compared against each other. The comparison was to provide a more complete picture of the IDP process.

4.6 Conclusion

The primary purpose of the chapter was to present the methodology used in the IDP evaluation research and to enable subsequent research to replicate the methods. A literature review was completed to provide the background on regulation and regulatory processes, and on the IDP process. The file search was conducted to determine the

number and duration of IDPs. The survey methodology was developed from concepts in the literature and enabled the researcher to obtain stakeholder input. The generated data will be presented in the Results and Discussion Chapters of the research.

CHAPTER V - INDUSTRIAL DEVELOPMENT PERMIT EVALUATION RESULTS

5.1 Introduction

The results of participant responses to the survey of their satisfaction with the IDP process are presented in this chapter. The summarized data were collected through the use of personal interviews (Appendix C and D) and questionnaires (Appendix E), as described in Chapter IV. Select detailed responses were summarized in these Appendices.

Comments and perceptions were sorted according to the following six different factors: process clarity, relevancy to current needs, public participation, costs incurred, time requirements, and process existence. The clarity of the process was categorized by comments surrounding the planning and coordination of the process, the availability and requirements of information, and the duplication of permit processes. The second section dealt with the relevance and adaptability of the IDP process to current industry needs through the examination of legislation, the requirement for O.C., and the suggested process improvements. Public participation within the IDP process was also examined in terms of the value and extent of participation, objections and interventions, acceptance of the facilities in the communities, common concerns, and conflict resolution. The cost considerations of the process were presented regarding the costs incurred to the proponents and interveners during the process, the existence of an application fee and intervener funding, and the duplication of costs. The fifth section dealt with the time considerations affecting the IDP process. Comments were made pertaining to the reasonableness of time to permit approval, the effect of public participation, and the

external influences on time to completion. The final section briefly presents comments pertaining to the perception of the need for the existence of the IDP process.

5.2 Survey Response Rates

As indicated in the methods chapter (Chapter IV), the survey methodology consisted of in-person interviews with individuals responsible for the IDP and mail-out questionnaires to interest groups. The response rate for the interviews was 100%. All 27 scheduled interviews were completed. The response rate for the mail-out questionnaires was 57.7% (15/26). One questionnaire was mailed to one individual per interest group. One of the questionnaires was returned incomplete; nine were returned indicating they had not been involved in public participation activities related to the IDP process; and five were returned completed. Five (19.2%) interest group responses were included in the evaluation.

The responses provided in the results and discussion should be weighed according to proportion of actual respondents for each stakeholder group. The responses from the stakeholders should be viewed accordingly: 1) representative responses were collected because all relevant government and agency staff were interviewed; 2) representative responses were received from the chemical industry because most of the staff involved in IDP permit applications were interviewed; and 3) a low proportion of the questionnaire responses were received from the interest groups; however, a small sample size was initially selected.

5.3 Clarity of IDP Process

5.3.1 Process Planning and Coordination

A clear definition of the process and function of the IDP would help ensure efficient and effective process for all parties involved. In order to aid in determining respondent perceptions process clarity, responses pertaining to the planning and coordination of the process were examined in terms of process design.

5.3.1.1 The Role of the IDP Process

The majority of company respondents provided positive comments about the role of the IDP process; three respondents did not. The most common responses focused on allowing or disallowing energy usage in a manner which was energy efficient, coordinated, environmentally sound, and "fair to the potential users of the resource and also the owners of the resource, the citizens and businesses of Alberta". Other roles of the IDP process were identified as providing an option for public input; a clear understanding of impacts; orderly development in the province; a mechanism for government to maintain input into the industry, into control over the resource, and to ensure "that nothing is missed"; and minimization of land use and protection of private property ownership. The respondents who did not see a role for the IDP process stated that there is currently an oversupply of energy resources; that the IDP does not affect the public interest; and the AEP are doing a "good rigorous job" of reviewing the environmental issues.

The EUB and departmental responses provided similar insight into the role of the IDP process. However, it was noted that: "The role has changed now and it has really become, in my view, more of a public participation/public acceptance process and door opener to permit exchange between government and the public." The IDP process was also seen as a method to introduce the Alberta Industrial Benefits Policy and the consideration of Alberta content, receive general and technical information on the project and company commitment, and allow interested parties to seek clarification on the project. One departmental respondent did not think the IDP continued to have a role.

The public interest groups commented on the role of public participation. Four of the respondents stated the role ensures accountability, kept the industry honest, focused on environmental issues, and provided the public with an opportunity to raise issues of concern "even if these concerns are not founded in reality". One respondents considered to public participation process to be a "smoke screen".

5.3.1.2 General Comments on Process Planning and Coordination

A number of company respondents (5) mentioned that the process they went through required too much detail and was unclear. A respondent stated that the permit process created some delays in a company's schedule and thereby decreased whatever construction and commercial advantage they could have had by reacting quickly. Two other company respondents mentioned that when companies were competing for the same

resource, the EUB could select the one they deem the most appropriate or resource use could be determined by a competitive market. The companies can also use the process to their advantage because "...your competitor is doing it you can use it to frustrate their doing something and gain some commercial advantage...".

Two responses focused on the recognition that they would contact the EUB prior to or at the time of the permit application to see if there would be any changes that "would affect the whole costing phase of the project". Other comments were made which dealt with a drawback of increasing costs because of the necessity of looking at alternate sites within the province to promote diversification; the ability to export out of the province without going through a permitting process; and the inability to locate the facilities with similar or exchangeable products. Departmental respondent comments were congruent with those made by the companies.

5.3.2 Information Availability and Requirements

The availability of IDP process information and the information requirements necessary to complete the application have been examined in terms of process design.

5.3.2.1 Initial Requirements For Permit Application

The chemical companies knowledge of the requirement of obtaining IDP was primarily dependent on the age of the facility and personal experience. Companies, which either had been subject to exemption from the permit, had permits on other sites, or were

going through the AEP approval process, were aware of the requirement that upgrades required an IDP. The departmental respondents stated that they notified companies of the IDP during their first visit, when the company became more specific that they were looking at Alberta as a site for development, or when the department was aware that the project would be over the threshold limit. Both EUB respondents stated company awareness of the IDP was driven by the company giving preliminary disclosure about the project.

All interest group respondents were aware of the requirement of obtaining an IDP. One respondent thought the permit should not be limited to examining hydrocarbons but the land use as well. The interest groups would raise their concerns to the companies regarding the operation or expansion of the facilities through discussions with company personnel, from information provided by the EUB, and from research and experience.

The company respondents were asked if they considered the EUB requirements and initial information to be clearly stated. Thirteen respondents considered the requirements for the IDP process as clearly stated, despite being in the middle of coordination of processes between AEP and EUB; while two did not. "They issue new instructions every few years which usually result in longer and longer applications and could be much simpler". The primary methods of contact mentioned were by personal communication and by letters. Company respondents commented on internally "flogg[ing

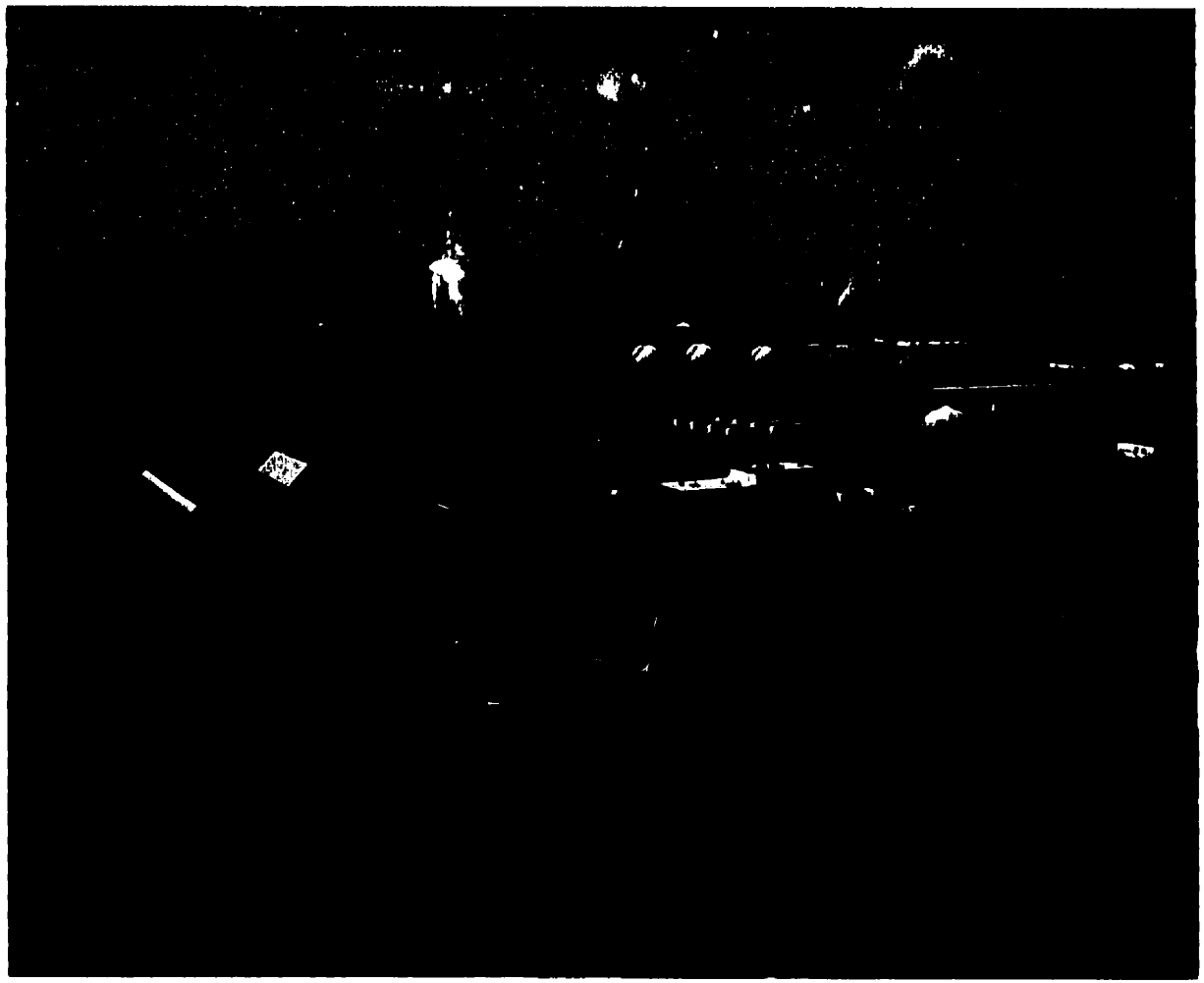


Plate 1. NOVA Chemicals (Canada) Ltd. Joffre Complex. Joffre, Alberta.
Source: Department of Economic Development and Tourism, 1996.

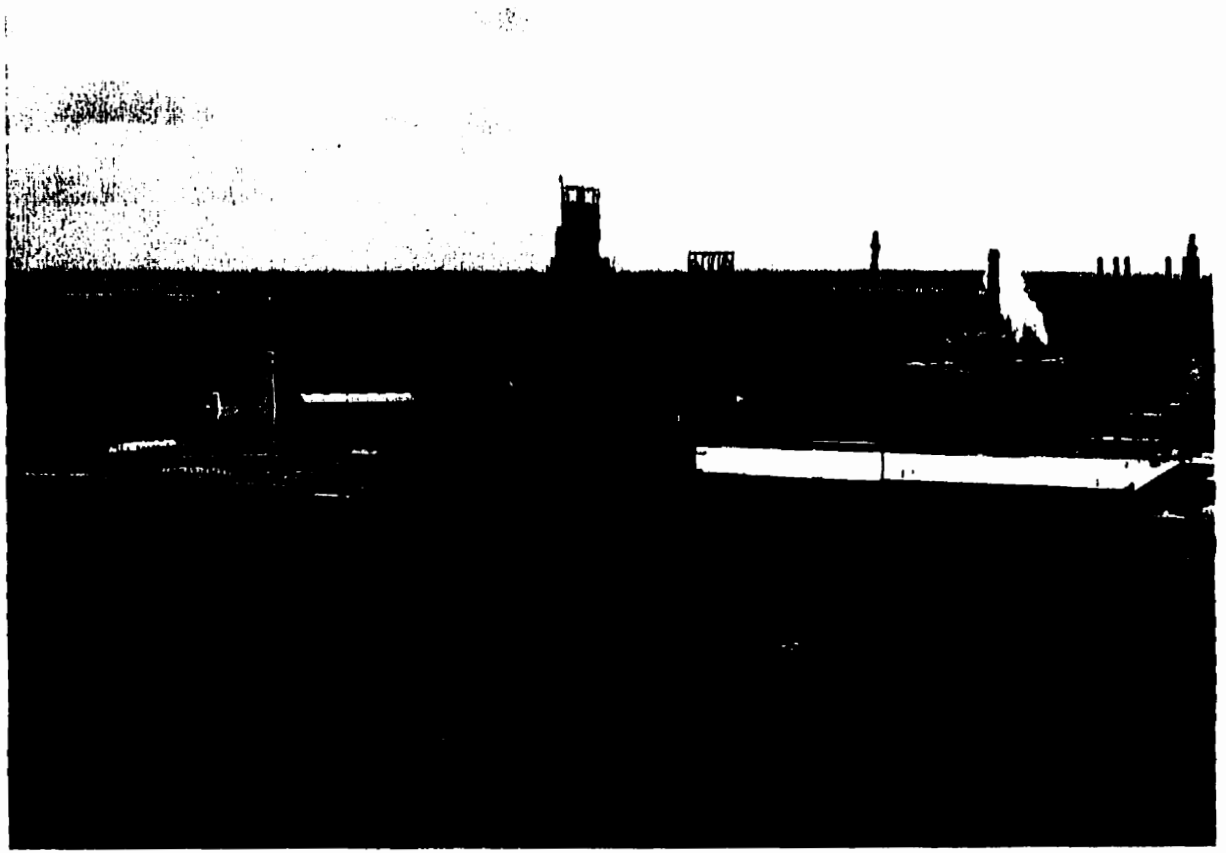


Plate 2. NOVA Chemicals (Canada) Ltd. Joffre Complex, Polyethylene Plant in Foreground. Joffre, Alberta.
Source: Department of Economic Development and Tourism, 1996.

Plate 3. Dow Chemicals Canada Inc., Western Canada Division. Ft. Saskatchewan, Alberta.
Source: Department of Economic Development and Tourism, 1996.

Plate 4. Dow Chemicals Canada Inc., Western Canada Division. Ft. Saskatchewan, Alberta.
Source: Department of Economic Development and Tourism, 1996.

Plate 5. Shell Scotford Complex, Styrene Plant in Foreground and Refinery in Background. Scotford, Alberta. Source: Department of Economic Development and Tourism, 1996.

the permit] to death, compared to perhaps what might have sufficed" or spending a lot of time "dotting 'i's' and crossing 't's' ".

Fifteen company respondents were also in agreement that the EUB asked the necessary questions to obtain the IDP information, one individual did not agree. "They give opinions but don't say, you do this and you'll be fine, it is 'well, start with this, we may have to ask you for more information' ". All the EUB and two of the departmental respondents were in agreement that the companies made their informational needs known, one departmental respondent did not agree, and another did not know. The communication needed to be " a two-way street" with the onus on the Board to ensure the correct information requirements were received by the company.

The majority of the company respondents (11) stated that the initial information provided to them was sufficient to complete the permit application. Six of these individuals had direct dealings with the EUB or used previous applications. "We may not have agreed with all that was required but we certainly knew what was needed for an IDP". Five respondents did not receive the Guide to Content but were informed of the requirements through informational letters and phone calls. Any subsequent revisions to permit applications occurred through personal contact with the EUB. One respondent considered the information requirements insufficient because "a simple line item on your IDP could be 'provide the economic impacts of this project on the province of Alberta'.

You can do a paragraph or you can do a whole Master's study on it - we have seen both". Others hired outside consultants.

Two departmental respondents did not think the initial information was considered to be sufficient as the information requirements were massive and the Guide to Content was outdated; however, one respondent pointed out that, in the EUB legislation and regulations, the threshold requirements were clearly spelled out. Other respondents stated that the companies were encouraged to use the Guide to Content and to review previous submissions. Both EUB respondents were aware that the Guide to Content needed to be updated because "the process may not be as clear as it could be or should be... Once the process improvements have been completed, it should help greatly to clarify the information needs of each application type". One of the interest group respondents felt the information presented was sufficient, one other individual did not. Four of the interest group respondents were aware of the Guide to Content. The respondents commented on the needs for the assessment of cumulative effects and land use.

The majority company respondents (11) commented that the level of detail required in the permits was appropriate; five respondents did not. The responses ranged from the need for less detailed information for a lesser application to providing too much information in order to ensure that all facets of the project were covered without a lot of duplication. Too much information was a concern of three companies because "that gives

us concern about our competitors' potentiality of going to school on our manufacturing process" and therefore the companies make changes to protect technology and "hide critical information". The EUB and the departmental respondents considered the level of detail required to be appropriate as they did not require the same amount of information from different permit types. There only needs "to be enough information in the application that a member of the public can identify what the impacts of the project are and how they may be impacted".

The interest group respondents agreed that the degree of information in a permit application was proportionate to the size and complexity of the project. The respondents were asked whether the information in original, major amendments, minor amendments, name change, and other applications were sufficient. The majority of the respondents responded favorably to the information; while others thought it could have been improved. "The information provided is quite variable in the industry. Some are very good. Some are inadequate".

5.3.2.2 Informing Public Interest Groups

The chemical companies, departmental, and EUB respondents stated that they made contact with the public through various mechanisms summarized in Table 1a. The majority of the interest group respondents (4) stated that their organization was made aware of a company obtaining an IDP when it plans to construct or expand a facility. The information was made available to the groups through the EUB and the companies.

Table 1a. Methods Used for Informing or Maintaining Contact with the Public (Aggregated for All Company, Departmental, and Agency Respondents)

	Company Responces	Departmental Responces	Agency Responces
Newspaper Advertisements	18*	3**	2***
Newsletters	15	2	0
Open Houses	20	3	1
Plant Tours	20	2	0
Meetings with Community	15	2	0
Formal Public Advisory Groups	7	2	0

* Responces are tabulated out of 21.

** Responces are tabulated out of 3.

*** Responces are tabulated out of 2.

**** All summations are representative of GeneralCommunication techniques used. They are not permit type specific.

5.3.3 Duplication of the IDP Process with Other Permits

In Alberta, in order to operate or expand facilities, many permit applications were required. Duplication of the IDP with other permits has been analyzed in terms of process implementation.

5.3.3.1 Satisfaction with Current Permitting System

The majority of the company respondents (12) did not consider the current system to be satisfactory. "I think they have gone the right way with Alberta Environment, it is not Clean Air, Clean Water anymore, but if there could be more liaison with IDP and environmental approvals, it would help". The remaining comments either emphasized that the current method was satisfactory (6) or that they did not know (3). The EUB responses were evenly divided on the issue of duplication. Similarly, the departmental respondents provided a polarized responses.

5.3.3.2 Comments on Overlaps Present Between Permits

The majority of company respondents (16) identified that overlaps were present, 3 identified no overlaps, and 2 did not know. The most common response (12) was the overlaps between environmental information in the IDP and the information requested by AEP. Other overlaps between permits were time, economic content, public notification, and information about the company, its capacity, and additional bureaucratic work by placing "appropriate conditions" on permits. One respondent stated: "there are not too

many overlaps because I find the ERCB asks Alberta Environment to be present at the hearings...".

The departmental respondents noted duplication to be with federal and municipal permits, in addition to the previous responses. The EUB respondents both commented on their attempts to reduce overlaps by "working closely with [AEP] and requiring information to be prepared only once". Three interest group respondents agreed that there were overlaps present with other applications. The overlaps noted were between provincial, municipal, rural and urban permits. Two respondents commented that their organizations gathering of information was affected by the overlaps; one organization was not affected.

When asked what the company respondents considered should be done to improve the current permit situation, three main groups of answers became evident. The first set (12) suggested that an increased cooperation between the IDP and EIA permits needed to be developed by combining the permits as much as possible and reducing repetition in documentation and at public hearings. The second set of responses (4) stated that a single window approach for both applications and hearings should be developed and the third set (3) responded that the overlaps should be completely removed. The departmental respondents stated it was necessary to minimize or eliminate any overlaps without "detract[ing] from the IDP process". The EUB was also in agreement particularly because of "government pushing to minimize regulation and with downsizing, I think it makes

sense to get rid of any overlap..." The two interest group respondents stated that the overlaps may be necessary as the "information is used for different purposes and subjected to different tests by the different permit issuers"; however, provincial permit requirements should not be allowed to override rural and urban permits.

The company respondents (7) did not think that the overlap was dealt with efficiently because they were uncertain about the extent of communication between the government departments and the agency, and 5 respondents stated that the overlap was dealt with efficiently. Two departmental respondents considered the overlaps to be dealt with efficiently and one did not. While both EUB respondents considered the overlap to be efficient because "we maintain contact with AEP when working in IDP projects requiring EIA's".

The efficiency of the overlap lead to questions on the extent of environmental information that should be included in the IDP. The majority of the company respondents (8) put forward the opinion that environmental information should be dealt with by the environmental department and energy should be dealt with under the IDP. Other respondents (5) were in agreement that AEP and the EUB needed to work in concert with each other to save a lot of time and energy because "Alberta Environment has a mandate, in general, for everybody and the ERCB is more worried about the immediate neighbors". It was suggested that the roles of the two permits needed to be specified. The IDP should be subject to the approval of EIA, in order to ensure that an efficient use of resources

occurs in a cost effective and environmentally responsible manner for the good of the province.

The views presented by the departmental respondents were varied. The responses ranged from segregation of environmental and energy information to the inclusion of environmental information in the IDP because of the EUB's mandate. An EUB respondent stated that "the Board has to have sufficient environmental information in the IDP application for it to be able to conclude that the environmental impacts of the project are acceptable". Two of the interest group respondents felt that the overlap between the two permits was dealt with efficiently while three individuals did not. One respondent stated that in order to attain sustainable development, environmental information should be an integral part of any economic analysis and should not be minimized.

5.4 Relevance and Adaptation of the IDP to Current Industry Needs

The company, department, and EUB responses about the relevance and capacity for adaptation of the IDP process to current industry needs were analyzed in terms of process design.

5.4.1 Regulation of Hydrocarbon Use

The company respondents provided a variety of comments regarding an effective method of regulating hydrocarbon use within the IDP. Three of the respondents

maintained that the current threshold was adequate. Four respondents suggested that instead of a threshold trigger the limits should follow with approval requirements under AEPEA in terms of industry types and efficiencies. "Not all approvals require an EIA but if whatever approval is required uses the hydrocarbon resources within the province then that in itself should trigger a requirement for an IDP or the AEUB involvement in safeguarding that the resource is used efficiently". Some other suggestions proposed were: not regulating downstream users; increasing threshold levels to exclude minor facilities; basing changes on community needs; or instituting a regulatory process for all uses of hydrocarbon resources. Some respondents mentioned criteria which they felt should be applied to the adapted process. These criteria were: projects which have the best economic sense for Alberta; a threshold value above which a permit application would be needed with companies below the threshold submitting a simplified application for resource record keeping; or regulation should be done under the AEPEA, if the same functions were carried out by AEP and EUB.

The departmental respondents also provided a range of responses from not knowing whether there was an "effective way of regulating the resource" to looking at the benefits of having realistically higher threshold levels. Respondents stated that ED and T people "like to have the IDP because it gives them an in with the companies and gives them more information about the project ..." or that permits which were no longer necessary should be reconsidered and potentially dropped. The criteria suggested were:

requirements of a minimum economic sized plant; focus on the value added product; volume of feedstock used; public interest; and efficiency of resource use without waste.

The EUB responses were similar to those of the department. Respondents stated that if future supply was no longer a question, raising the threshold would not be necessary and the EUB could eliminate the fuel use only facilities, which were under the NRCB jurisdiction, or AEP could be responsible for IDPs. They suggested the projects with the most impacts and most fuel and feedstock use should require the most scrutiny. A response by one interest group respondent stated that the more effective mechanism of regulation would be the use of a trigger. "Therefore, the use of AEP's EIA criteria might be appropriate providing that cumulative effects are included as EIA triggers, or considered in developing thresholds".

5.4.2 Comments on Altering Legislation to Focus on Industry Needs

The majority of the company respondents agreed that the legislation should be altered to allow the EUB to focus on the changing needs of the industry; one individual did not. The respondents felt that flexible regulation of energy efficiency, was necessary, in order to be competitive in a changing industry and meet community needs. The EUB should be provided with more discretion when dealing with renewals for existing permits operating under exemptions. The legislation could also be reviewed at a regular interval with the possibility of sunsetting the regulation. These changes may be achieved by including a discretionary clause to deal with conditions at the time of application without

restricting the free market. Another suggestion provided was to enact legislation which sets limits on production and exportation. One respondent did not think changes would be appropriate because of the global nature of the oil and gas industry.

The departmental responses were similar to the company responses. One departmental respondent liked the current system where ED and T attaches conditions to the O.C. while the Board can ask for attachments. The EUB respondents were in agreement with pervious comments because it "makes sense to insert a clause to make minor changes which Government would not be interested in to avoid having to get an O.C. This addition would help obtain a faster turn around time on applications".

One of the interest groups respondents agreed with the fact that the Oil and Gas Conservation Act should be changed; while 2 individuals did not. Additional comments were that the Board "should have a long term view and that [it] should override the short term immediate needs of the industry. The EUB should be able to accommodate short term or current needs as long as they are consistent with their long term objectives".

5.4.3 Relevancy of Oil and Gas Conservation Act

The majority of the company respondents (9) did not consider the Act to be relevant in its present form and needs to be reviewed and revised "to suit the environment of the nineties". Statements were made pertaining to the difficulty of ensuring the present and future availability of hydrocarbons because "by definition you are using it and how

can you use something and in using it ensure that there is still future left" and that once a 30 year supply occurs, then it would be prudent to institute such a system. Additional comments included the need to incorporate flexibility, generally touch on environmental affairs. Five respondents considered the Act to be relevant. These respondents felt that regulation was necessary because of the need to focus on the efficient use of resources, for primary conversion and manufacturing use, in the public's best interest.

Three of the departmental respondents stated that, in addition to the above ideas, the Act should be changed in order to make it more relevant to the "unregulated free market environment". The EUB noted that the same concern does not exist with public participation and the present and future availability of hydrocarbons. The exact nature of the changes would be based on an internal review and government input. The majority of the interest groups (3) felt that the current Act was still relevant; one individual did not agree. A comment was made suggesting strengthening the provisions regarding sustainable development.

5.4.4 The Requirement of Obtaining an Order in Council

The majority of company respondents (16) did not agree that all permits should be subject to an O.C.; one individuals considered it to be necessary. The application for an O.C. increased the time to permit completion and created more bureaucracy. One respondent commented that the "Minister has got to do something". The O.C. was considered to be the portion which could be streamlined to be open to less political action

and would be put into effect by ED and T, in conjunction with the EUB or by the Board itself.

One respondent stated that a decision must be made to require all or no O.C.s. The majority of the respondents stated only the initial and major amendments should be subject to an O.C.; while four respondents did not deem a need for any O.C.s. Other individuals stated only major grassroots facilities should require an O.C. Another individual stated that an O.C. should not be granted when the Board deems the facility to have a "significant impact or change of impact on ... community, environment, or resources".

The departmental and EUB responses were similar to those presented by the companies. They did not see the O.C. as significant for minor changes and recognized that it slowed down the IDP process. It was noted by one respondent that it would be necessary to define significant amendments requiring an O.C., such as doubling of capacity. The interest group responses ranged from all permits should require O.C.s prior to construction to no O.C. requirement for administrative permits causing no impact. The interest groups were also asked to indicate specifically which permits would require an O.C. The responses were fairly evenly divided.

5.4.5 Process Improvements

5.4.5.1 Adoption of Short and Long Processes

In 1991, the ERCB undertook a study which recommended that, for administrative and minor changes, a short process bypassing unnecessary steps and, for major changes, a long process would exist. The majority of company respondents (20) agreed that the IDP process would be more efficient if the new processes were adopted; one individual did not concur. One respondent commented that the most likely result would be saving of time because unnecessary work was avoided, even in the long process. Another suggestion made was that if environmental approvals were required, the company should not be required to complete a full IDP. The departmental and EUB respondents were in agreement with the companies as the process would be less complex, more streamlined, and would require less of the Board's and government's time. Two of the interest group respondents concurred with the previous respondents. Three of the respondents did not provide comments.

5.4.5.2 Additional Comments on Process Improvements

In addition to the adoption of a short and long process, the EUB, AEP, ED and T, and company respondents provided individual comments on improvements to the IDP process. The majority of the respondents focused on reducing the duplication between the IDP and AEP approvals in terms of approvals by combining the permits into "one-stop shopping" or a "one window approach". The second most common alternatives were to streamline, simplify, or eliminate the IDP process to reduce unnecessary "red tape" by

using techniques, such as computer technology and a database, and to reduce the time and money spent while increasing their competitive edge. The third suggestion was that it would be useful for the companies to have someone to "shepherd our permits through the government" and earlier non-bureaucratic consultation. A fourth comment was made pertaining to the incongruency of unregulated exporting out of province, while regulating use in Alberta. Another individual had concerns about the confidentiality of information given to the EUB on proprietary technology.

One interest group respondent commented that "in the past 8 to 10 years, there has been a marked improvement and co-operation of both the Board and the companies". Other potential improvements that were mentioned were the need for better access to financial resources; possible linkages between planning processes under different permits; earlier involvement of the public; and potential limits to participation to a radius around the site.

5.5 Public Participation in the IDP Process

The IDP process public participation results have been analyzed according to responses surrounding the design and the implementation of the process.

5.5.1 Process Design Comments

5.5.1.1 Value of Public Participation

Many important factors of public participation in the IDP process were identified by the companies. Respondents mentioned the importance of informing the regulatory authorities and the general public of any changes in the facilities operations, industrial limitations, public safety issues, and environmental impacts that have occurred or could develop in the future. " I think it is very valuable to have the public in agreement, informed, teach the public about what we are doing, because you live with them, play with them, or whatever. I think it is very valuable to get their support". Four company respondents stressed the benefits of educating the public. Three company respondents did not see any value to public participation because "there is so much gas out there that is available and the benefits of having more of that gas extracted, in terms of economics, is very important"; "no clear defined rules on public participation"; and at times it can get into "a real political football".

The process provides the public with a venue for release of opinions in addition to a sense of involvement due to meetings and other outreach programs. The methods currently used by the chemical companies, EUB, ED and T and AEP were summarized in Table 1a and interest group responses were presented in Table 1b. A respondent mentioned that the program leaves "the perception that a company is not trying to hide something". Another respondent commented that the company was trying to achieve acceptance of the facility in the community.

Table 1b. Methods Used for Informing or Maintaining Contact with the Public (Aggregated responces for Interest Groups)

	Interest Group	Responces	
	General Communication	During New Applications	During Amendments
Newspaper Advertisements	3*	2	1
Newsletters	3	1	2
Open Houses	4	3	3
Plant Tours	3	1	1
Meetings with Community	4	4	3
Concern Phone Lines	1	2	1
Community Advisory Groups	3	3	1

*All responces are tabulated out of 5.

The need for a two-way participation process was also noted as being desirous. Four company respondents mentioned the merit of maintaining an open public involvement process which was initiated prior to construction of the facility in order to "get the public on board ahead of time". The IDP process was one mechanism the companies use in selling their facility and averting any major future problems.

The EUB and departmental respondents were also in agreement with the perspective brought forward by the companies. The EUB also sees the process as a "major advantage to the company that comes with greater likelihood of having the project approved without a public hearing which means a much shorter approval time".

The majority of the interest group respondents comments were in agreement that public participation involved raising issues which affected them which may have been missed in an EIA or expert report. The process may lessen conflict and formal adversarial approaches by affected parties. This process would then achieve enhanced public relations and an informed public.

5.5.1.2 General Public and Industry Interventions and Objections

The company responses on which individuals **can** intervene or object to an application were divided four ways. Nine respondents commented that anyone, not restricted to provincial residents, can intervene or object; six individuals responded that, as presented in the legislation, anyone with legitimate concerns who has been directly

Plate 6. Community Drill Table Top Exercise Organized by NOVA Chemicals Ltd.
Source: NOVA Chemicals (Canada) Ltd., 1996.

Plate 7. Visitors at 1996 Joffre Summer Tour Program, NOVA Chemicals Ltd.
Source: NOVA Chemicals (Canada) Ltd., 1996.

Plate 8. March 14, 1996 Open House in Haynes, Alberta. NOVA Chemicals Ltd.
Source: NOVA Chemicals (Canada) Ltd., 1996.

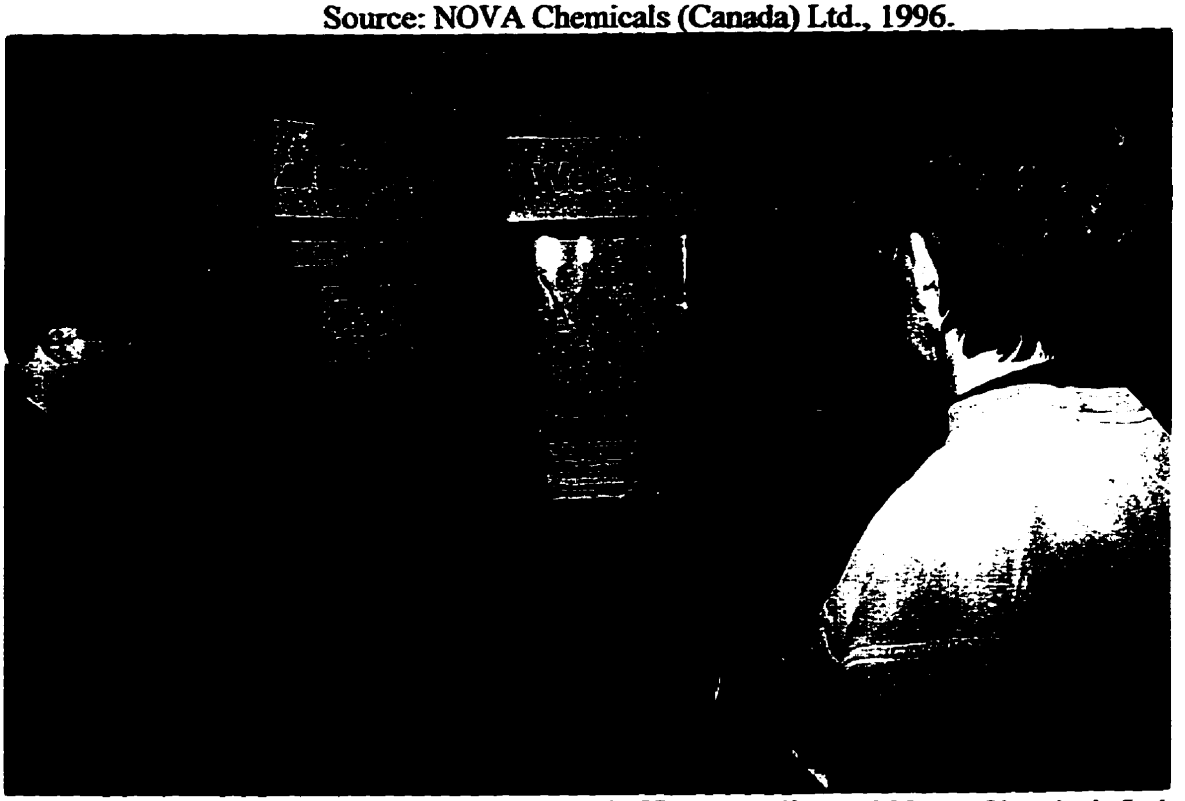


Plate 9. October 24, 1996 Open House in Haynes, Alberta. NOVA Chemicals Ltd.
Source: NOVA Chemicals (Canada) Ltd., 1996.

Plate 10. Chief Michael R. Pennington of the Oklahoma City Fire Department at Red Deer College Arts Centre Organized by NOVA Chemicals Ltd. (Gail Surkan, Mayor of Red Deer in Center of Photo).
Source: NOVA Chemicals (Canada) Ltd., 1996.

Plate 11. Sign for Public Meeting at Dow Hydrocarbons Plant, 1989.
Source: Dow Chemical Canada Inc., 1996.

Plate 12. Public Meeting at Dow Hydrocarbons Plant, 1989.
Source: Dow Chemical Canada Inc., 1996.

Plate 13. Public Meeting at Dow Hydrocarbons Plant, 1989.
Source: Dow Chemical Canada Inc., 1996.

affected by the development can object; two respondents expressed that interveners could be alternate users of the resource and public interest groups; and three individuals were not aware of the requirements. All the EUB and three of the departmental respondents stated that "Basically anyone who is a party whose rights may be affected directly and adversely impacted by the proposed plant or plant modification/expansion" can intervene or object to an application. One departmental respondent understood that anyone can intervene or object. The interest group respondents were asked to select from a list of the most applicable response(s). The majority of interest group respondents (3) selected the individuals immediately surrounding the plant. However, in addition to this selection, five other categories were selected ranging from interested parties out of province, cities and other municipalities to anyone affected including resource companies.

When the question was posed to them as to who they felt **should** be able to intervene or object, the company responses varied somewhat from the previous responses. One respondent commented that anyone should be able to intervene or object; eleven respondents felt that only public directly and demonstrably affected could be involved; one respondent stated that "whoever would be impacted negatively by the development"; one individual responded that "people with alternate proposals that should be evaluated, ... I am not sure that organizations that are not resident in the province should have a right to object"; and one responded felt that the "AEUB should have open discretion on bonafide concerns and they should be able to differentiate between those things...".

All of the EUB and three of the departmental respondents restated that anyone who's rights are directly affected and adversely impacted by a proposed plant or plant modification/expansion should be able to intervene or object to an application. One respondent understood that anyone could intervene or object. This individual was not the same individual who replied differently from the other respondents in the previous question. The opinion of the interest groups regarding who should be able to object varied from the previous responses. The responses ranged from interested parties out of the country to those immediately surrounding the plant with no one selecting individuals living in cities and other municipalities.

In addition to public interventions, company interventions have been recorded. Six groupings of responses were provided by the respondents. The responses were competition and other economic factors (10); environmental effects such as emissions, noise, or "whatever it is that might make it more difficult for them to work with the community" (4); more efficient or alternate of resource use in Alberta and Canada (4); "a flaw in another company's development or its impact" (1); interventions based on a direct negative impact (1); and "Unless you deprive them of access to an energy source, I don't think they would have a basis. ... It should not impact on the right to do business in the province" (1).

Both EUB respondents stated interventions were due to supply issues and facility need. The Departmental responses indicated commercial reasons, competition for a limited resource, and environmental or cumulative effects. One departmental response focused on an industry external to the chemical sector - tourism. The tourism operations would have environmental concerns. The interest groups indicated, from a list of responses, that product competition (3), encroachment on the market (1), competition for raw materials (2), environmental effects (1), proximity of facility (2), and employment (1) were possible reasons for a company being an intervener.

5.5.1.3 Extent of Public Participation

The question was posed to the interviewees whether public participation was required in all permit applications. The responses presented many points of view. The most prominent view (13 responses) was that formal public participation proceedings should only take place for initial applications and major amendments. "I would say this should be only on major changes. ... we have seen some small ads... If you give me 10 a day, I can guarantee you, nobody is going to read them. It is too frequent, and you lose the public consultation idea". Of these responses, two presented the opinion that the amount of participation should be linked to the current threshold value in the Oil and Gas Conservation Act and two others felt that the focus should be on major amendments with environmental implications. "We need to have a clear position on what type of amendments should reopen public hearings or requirements for public hearings and which ones the public needs to give the board power to rule on internally". Two

individuals stated public participation should remain as it currently stands. Another individual stated that the EUB should have discretion regarding public participation until the public can be confident that companies were following the Responsible Care initiative. Others did not receive any responses from public involvement and "spend a lot of money trying to get public participation and end up basically nothing".

All the departmental respondents stated that initial projects and major amendments should be the focus of public involvement. The EUB respondents felt that public participation should occur "in any areas where there is likely to be public concern. We should know what that public concern is and be able to address it regardless of whether it is a minor or major amendment".

Two of the interest group respondents stated that public participation should play a part in all permits thereby giving the participants an opportunity to confirm or dispute the quality of the operation. "Changing circumstances should be treated the same from the perspective of the applicant or permit holder and the public". Another respondent stated that only major amendments or initial applications should be included.

5.5.2 Process Implementation Comments

5.5.2.1 Acceptance of Facilitates in the Communities

Thirteen respondents considered public involvement to be an major factor in the positive acceptance of the facility in the company's community. The respondents stated that acceptance was due to an increase in communication and openness in dealing with issues and concerns. For one respondent there was no change in acceptability. Other individuals noted that " we become accountable to the community when we have a perceived negative input on the economy.... As far as energy consumption and emissions, I don't see the public holding us accountable"; and "It is very difficult to know how the community accepts the facilities". The EUB and the department comments were in agreement that the companies have "developed a good reputation with the public" through open discussions. "I have talked to people from the community ... they were very pleased how they were involved and how the company responds to questions".

The interest group responses did not portray the same degree of positive acceptance as the companies perceived. The positive comments were that the process was very important and was dependent on the company's past record and commitment to responding to public input. The company's willingness to be accountable for their actions created easier acceptance and appreciation for information beyond the requirements. The negative comments made were that the companies did not share the truth and did not recognize or understand land use issues.

The prevalence of current public interest was compared to the interest at the time of initial permit application. Both the positive and negative opinions received seven responses ranging from: "I would say public interest is as prevalent although much more positive" to " If the project is something you don't like you will see an increase in intensity of public interest in order to kill the project. So, after they understood the whole application and are told they can accept whatever comes out then you don't hear from them".

The EUB responses were polarized. One respondent stated, with respect to advertising for hearings, that the EUB received less objections and interventions than in the past, and the other respondent considered public interest to be even stronger due to environmental concerns. The departmental responses were polarized in a similar manner.

The majority of the interest group respondents (3) noted a change in the degree of public interest. One respondent stated that the public was "better informed or at least aware". The opinions voiced by the interest groups were also noted to be different. Respondents commented that people were becoming more concerned with cumulative effects of emissions, public health, and environmental concerns.

The companies commented on the whether the level of interest affected the manner in which they deal with the public. Ten respondents stated that the manner of contact has been altered. "Over the years we have come to realize that you have to calm

the fears of people, we have to have the cooperation of the citizens"; and it is beneficial to address the public early "so that our project does not get delayed. I would say that 99.9% of the interest dropped off". Others noted environmental awareness was useful to "keep the public informed as much as possible whether it is required under the IDP or not". The proactive focus on information centered on environmental concerns, "value of the project", and employment. Eight respondents did not see any change in the interest levels. One respondent from the EUB and one from the departments felt that an increased interest in the companies was a result of public consultation. Another departmental respondent was uncertain as to the benefit and the third respondent did not think public interest affected company response.

Three interest group respondents stated that the interest in environmental issues has affected the manner in which they deal with the companies. The respondents noted that more research into the effects on the environment was needed and recommendations could be made "to the applicant as to how they may change their operation".

There was a recognition that the communication between the companies and the public was a two-way process. In light of this, the majority of the companies have attempted to make the available information and any additional feedback to the public more comprehensive and understandable, often with the assistance of the company public relations personnel, through the use of multi-media presentations, personal discussions, letters, through the Community Advisory Panel, and through donations to the

communities. The majority of the companies also want continued feedback from the public. "We need to know what the public is thinking so we could alleviate their concerns, and maybe prevent unnecessary legislation [and] intervention on future site expansions or plant modifications." The interface with the public occurred through outreach programs, the Community Advisory Panel, phone lines, and "Sustainable Development reviews or newsletters". The EUB and departmental responses were all in agreement that the companies provided information in an understandable form and provided and accepted feedback. "If not, we would make sure it was".

The interest group responses were divided in terms of the sufficiency of information provided to them in response to objections or interventions. One respondent stated that the companies do not always address the concerns raised, such as land use issues. While another respondent commented that the interest group receives what was available. "It may not be sufficient as there is much about impacts which have not been thoroughly researched". The clarity of information provided to the interest group was considered to be company dependent. The majority of the respondents (4) felt that the companies were receptive to the continued communication from the interest groups throughout the IDP process. One individual stated: "they keep coming to us for information but do not act on the issues".

5.5.2.2 Common Public Concerns

The majority of companies, the EUB and the departmental respondents stated public concerns were related to the economy, health and safety, and environmental issues. The economic concerns raised were agricultural land use issues, availability of employment, and an increase in local business. The health and safety concerns dealt primarily with the safety of the surrounding communities from "catastrophic failure" and long term health issues, such as asthma from plant emissions. The most frequently raised concerns were environmental issues, such as water quality, air emissions, noise concerns, smoke, odour, traffic, pollution, effluent discharge limits, waste management, and light from flares. One company respondent commented on a company concern which was the "lack of confidentiality of information submitted as part of the application process". The common concerns or issues raised by the interest group respondents were noise, air pollution, smell, visual disturbance, employment, water quality, soil, land use, property value, mixing non-compatible industries, and traffic.

5.5.2.3 Conflict Resolution with the Public

The conflict resolution techniques used by the companies were quite variable but were all aimed at reducing any conflict or concern prior to proceeding to the hearing stage. The most often used method of conflict resolution (10 responses) was through communication and negotiation with the public. The other companies used public outreach programs, such as open houses and the Community Advisory Panel, a consensus approach, the round table format, and fact finding. One company would defer decisions to

the hearing stage or ask the board to include it in their findings. The interest groups stated that they used a number of different forms of conflict resolution: mediation, formal negotiation, legal services, letters, personal phone calls, media, and personal visits.

The majority of the companies stated they did not need to use conflict resolution techniques often. One company used the process extensively to avoid conflict. Another was not aware of any incidences where resolution was needed. The remainder of the companies employed the techniques when they considered them to be necessary. The departmental respondents stated that some forms of resolution came from the EUB if the companies could not work things out. The department would become involved "if there is a policy issue involved".

The interest group respondents provided variable estimates of the extent to which conflict resolution mechanisms were used. One respondent commented that they utilize conflict resolution whenever there was an opportunity for dialogue. Others have used mediation and intervened at ERCB hearings.

5.6 Cost Considerations in the IDP Process

The cost considerations were considered to be a result of the implementation of the IDP process.

5.6.1 Costs Incurred in the IDP process

The costs incurred by the IDP process were divided into total costs and direct and indirect costs (Table 2). The total costs incurred by the companies were estimated by nine respondents with three providing no response and nine not knowing the amount. These values recorded ranged from $5,000-17,000 for an amendment to $100,000- 500,000 for major projects. One respondent commented that the cost "varies a lot with the size of the project". The estimates received for the direct and indirect costs varied; in most cases, they were incomplete due to lack of expense knowledge of the respondent. Another respondent emphasized an additional cost because of the necessity of having an "option on the land" in order to control the land prior to receiving a permit.

All departmental and EUB respondents except one of the EUB respondents reported not knowing the costs incurred in either of the two categories. There was recognition that "I think it would vary from company to company". The EUB respondent estimated the agency's costs to be "1 1/2 years of staff time annually for all IDP applications (approximately X10/year)...$70-80,000 per year. ... it all depends, if it goes to a hearing, then you are immediately looking at more dollars. We haven't had any hearings since 1990".

The interest groups incur total, and direct and indirect costs associated with information collection and public hearings (Table 3). The total costs were reported as

Table 2. Categorical Breakdown of Direct and Indirect Costs for Company, Departmental, and Agency Respondents

Dollars ($)				Company	Responses				
Permit Application Fee	not aware of yet	N/A	not done enough to know	N/A	depend on project size	N/A	N/A	N/A	don' t know
Contracted Work	N/A	N/A	N/A	approx. 10-20,000	250,000	1,000	N/A	80,000	approx. 100,000
Cost of preparation of application	N/A	N/A	N/A	N/A	500,000	3,000	N/A	10,000	20,000
Cost of hearings	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50-100,000
Cost of in-house labor	N/A	N/A	N/A	approx. 100,000	N/C	N/A	10,000	10,000	30,000
Public relations cost	N/A	N/A	N/A	N/A	own people not charged	1,000	2,000	N/A	10-20,000
Other (Please Specify)		legal fees time delays							option on land - take possession for 6 mo. to 1 yr.; then identify location and control land - 50-100,000
Total Cost	N/A	N/A	N/A	110,000-120,000	750,000	5,000	12,000	100,000	aprox. 260,000 - 370,000

Table 2 Continued. Categorical Breakdown of Direct and Indirect Costs for Company, Departmental, and Agency Respondents

Dollars ($)	Company	Responses				Departmental Responses				Agency Responses	
Permit Application Fee	minimal	N/A	1,100	1,100		N/A	N/A	N/A		1,100	1,100
Contracted work	1/2 the cost	N/A	1,000	6,000		N/A	N/A	N/A		N/A	N/A
Cost of Preparation of application	large part contracted	5,000	20,000	2,000		N/A	N/A	N/A		N/A	N/A
Cost of hearings	N/A	N/A	N/A	N/A		N/A	N/A	N/A		N/A	N/A
Cost of in-house labour	the rest of the costs	N/A	N/A	6,000		N/A	N/A	N/A		N/A	N/A
Public Relations costs	10%	N/A	1,000	2,000		N/A	N/A	N/A		N/A	N/A
Other (Please Specify)											
Total Cost	no value possible	5,000	23,000	17,100						1,100	1,100

Table 3. Categorical Breakdown of Direct and Indirect Costs for Interest Group Respondents

Dollars ($)	Interest Group	Responses
Contracted work	2,000	N/A
Cost of hearings	N/A	400
Cost of in-house labour	N/A	400
Public Relations costs	1,000	N/A
Invited Speakers	N/A	N/A
Lawyers	7,000	N/A
Transportation (and per diem)	4,000	200
Other (Please Specify)	3,000 (expert witness)	N/A
Total cost	17,000	1,000

being highly variable ($1,000 - 100,000). The direct and indirect costs were responded to by two interest groups totaling $1,000 and $17,000.

5.6.2 Existence of a Permit Application Fee

The existence of a permit application fee was noted by ten company respondents, one stated a fee did not exist and ten did not know of the existence of the fee. The fee was estimated to be either $1000, $1100, or the amount of payment could not be recalled. Two of the ED and T and AEP staff were aware of the fee, one did not think a fee existed, and one did not know of its existence. Both the EUB were aware of the existence of the permit application fee.

The permit application fee was known in advance of an application by six companies primarily due to prior experience with permit applications, four were not

notified in advance, nine did not have information on the permit fee, and two did not provide an answer. The two of the respondents referred to being notified by letter and one mentioned being invoiced.

Both the EUB respondents stated the companies were made aware of the fee in advance of or at the time of application. This was done "when we advise the company of application requirements" and they considered the fee to be less than administrative costs. Two government respondents recorded that either they or the EUB advised the company. One respondent mentioned that in the current system "fees should be related to the amount of work you expect...".

5.6.3 Existence and Use of Intervener Funding

All (5) of the interest group respondents were aware of intervener funding. However, only three indicated they had used such funds, one did not use the funding, and one did not respond to the question. One cost estimate was provided at the sum of $3,400. Other sources of funding accessed were identified as private donation and membership.

5.6.4 Duplication in Permit Costs

The existence of duplication of costs with other permits was cited by the companies as most commonly occurring due to the overlap between EIA and other environmental information, as well as some general information, applications for permit to construct, the potential need for separate EIA and IDP hearings, and application to

operate. Other companies attempt to spend the money only once. One respondent stated that a minor cost was incurred because "you have done the work, you may have to reformat the data". Another respondent stated that no duplications occurred because "We have all other permits in place". The government respondents comments concurred with duplication existing for environmental informational requirements; however, these requirements were minimized as much as possible through cooperation between AEP and the EUB. One government and one EUB respondent did not consider there to be any duplication in cost.

All of the government and the majority of the company respondents agreed that a reduction in overlaps between permits would result in a reduction in the total cost to the companies. The reduction in overlaps once again focused primarily on the EIA and environmental information with interested parties working more closely together to reduce the overlap or to eliminate it as much as possible. The EUB respondents did not know if a change would be evident because "the amount of overlap is probably minimal but the people most able to judge that are the companies...". Two interest group respondents identified there to be duplication costs with other hearings, such as county development permits.

5.7 Time Considerations in the IDP Process

The results of the time considerations on the implementation of the IDP process were obtained from survey responses.

5.7.1 Comments on Reasonableness of Time to Permit Approval

The length of time required for completion of the IDP from application to final approval was considered to be reasonable by twelve and unreasonable by six chemical company respondents, while three respondents were uncertain. The time specified in the responses ranged from one month for amendments or exemptions, or 2 to 3 months without hearings to 1 year in length. When asked to report the actual length of time for the completion of the main steps of the most recent permit or amendment nine responses were provided with a range of 5.37 to 13.63 months and a mean value of 9.18 months (Table 4).

Some of the comments pertaining to the chemical companies perception of the reasonableness of the timeline were that the process could be excessive, slow, and cumbersome. Some comments regarding the time to completion were positive because the process was perceived to be "...done in a timely manner and everybody was very cooperative." and other comments recognized the need for the time required for public participation: "...we have to give [the public] time necessary, or at least notify them so that they can get their concerns and issues addressed".

Three of the government and all of the agency respondents considered the time frame to be reasonable. Two respondents from ED and T stated that the permitting process could be estimated at 6-9 months. One respondent from the EUB stated that an

Table 4. Time Frame of IDP Process by Activity for Company and Agency Respondents

		Company	Responses		
Permit	IDP 91-1 PI and 91-2 PII		original		IDP 89-1; 89-2; 89-3
Initial contact	reapply January '92 (week 0)	week 0	September '89 (week 0)	November '94 (week 0)	week 0
Time to submission		11 weeks		4.4 weeks	4 weeks
EUB registers application	13 weeks	3 days (0.4 weeks)	12.1 weeks		
Review of application by EUB		9.7 weeks			
Referral for advice from departments					
Deficiency materials requested		10 weeks		2.3 weeks	
Deficiency materials received		3.8 weeks	29 weeks	2.7 weeks	
Total time for public participation process		ongoing - '88-'89'90	N/A		
Notice of hearing	no hearings	no objection/ hearing		4.4 weeks	
Last day for objections					
Length of time for hearing					
Report issued					
EUB sends draft OC for recommendation					
Department notifies Minister					
OC recommendation signed by Minister					
Submission of OC to cabinet		11 weeks			
OC signed by L.G. in C. and granted		9 weeks			17 weeks
EUB receives OC	32 weeks	approx. next day (0.1 weeks)	15.7 weeks		
EUB issues permit		approx. 1 week later	1.7 weeks	1)5.4 weeks 2) 2.3 weeks 3)1.6 weeks	2.8 weeks
Other					
Total weeks	45	56	58.6	23.1	23.8
Total Months	10.46	13.02	13.63	5.37	5.53

Table 4 Continued. Time Frame of IDP Process by Activity for Company and Agency Respondents

		Company	Responses			EUB Response
Permit -	Amendment		ID CA 84-2	CIL 81-1 Amendment		General
Initial contact	week 0	few months ahead (week 0)	1 day (week 0)	1 year before design		1-2 hours (optional)
Time to submission	8 weeks (estimated)	16 weeks	4 weeks			
EUB refers application			4 weeks			variable
Review of application by EUB	4 weeks		4 weeks			4-6 weeks
Referral for advice from departments						1 week
Receipt of advice from departments						4-6 weeks
Deficiency material requested	4 weeks	2-4 weeks	0.1 weeks			1 week
Deficiency material received	2 weeks	1 week				variable
Total time for public participation process	2 weeks	12 weeks				
Notice of hearing						1 week
Last day for objections						3 weeks
Length of time for hearing		0.4 - 0.7 weeks	in process			0.1 - 0.7 weeks
Report issued	4 weeks	8 - 12 weeks				6-16 weeks
EUB sends draft OC for recommendation	1 week					1-2 weeks
Department notifies Minister	1 week					
OC recommend signed by Minister	1 week		2 weeks			
Submission of OC to cabinet	1 week		2 weeks			
OC signed by L.G. in C and granted	1 week	4 weeks	in process	December 2 '81		
EUB receives OC	1 week		16 weeks			3- 12 weeks
EUB issues permit	1 week	almost as soon as OC signed		December 15 '81 (1.8 weeks)		1-2 weeks
Other						
Total weeks	31	43.4 - 49.7	32.1	no value		25.1-50.7
Total Months	17.2	10.89-11.56	7.46			5.83 - 11.79

efficiently processed application could be completed in 3-4 months. The remainder of the respondents from ED and T, AEP, and EUB did not provide an estimation but stated that the time to permit completion was dependent on a number of factors, such as complexity and completeness of the application, length of time required to obtain an O.C., hearings, and obtaining EIA approval. The actual length of time to permit completion was not commented on by ED and T or AEP. The EUB provided a composite estimate of permit completion time. The estimate was 5.83 to 11.79 months with a mean of 8.81 months (Table 4).

Interest group respondents commented on the reasonable length of time required to complete hearings and settle issues: three respondents considered the length of time to be reasonable, one did not. The respondents considered the appropriate amount of their time spent on public involvement to be 6-8 weeks (Table 5). This fell within their estimate of 4-8 weeks of actual involvement. Two suggestions were offered as to what could be done to shorten the time to completion: rural and municipal zoning and mediation.

5.7.2 Effect of Public Participation on Time to Completion

The chemical company responses regarding public participation affecting the time to completion of the process were balanced. The public participation was seen as affecting time to completion by nine interviewees, nine responded that the time to completion was not affected, and three individuals did not answer. The interviewees

Table 5. Time Frame of IDP Process by Activity for Interest Group Respondents

	Interest Group	Responses	
Permit			
Initial contact			
Time to submission			
EUB refers application			
Review of application by EUB			
Referral for advice from departments			
Receipt of advice from departments			
Deficiency material requested			
Deficiency material received			
Total time for public participation process	4 weeks	8 weeks or 40 hours	1.42 weeks (report prep)
Notice of hearing		2 hours	1.42 weeks (hearing prep)
Last day for objections		2 hours	
Length of time for hearing		8 hours	1.42 weeks
Report issued		4 hours	
EUB sends draft OC for recommendation			
Department notifies Minister			
OC recommend signed by Minister			
Submission of OC to cabinet			
OC signed by L.G. in C and granted			
EUB receives OC			
EUB issues permit			
Other			
Total weeks	4	8	4.28
Total Months	.93	1.86	1

stated that public participation lengthened time because of hearing scheduling, level of detail required, taking company concerns into consideration in the facility design, and time allotment for intervener and competitor responses. "However, if the public participation process began at the same time that an application is submitted then there would be a significant decrease in time, a minimum of 6 months". Another perspective observed was that the time to completion for the companies was not affected because work was done the up front, minimal public comment was received, and "As far as I know, public participation has always been part of the process so I cannot say how it has altered the amount of time".

One of the EUB respondents stated that time to completion was affected by public participation; the remainder of the EUB, ED and T, and AEP responses varied. The most common responses were public participation was always a part of the IDP process; should be completed before reaching the application stage; and would be best dealt with "up front, early in the planning process, and if done properly, can reduce the time requirements in the process later".

All interest group respondents maintained the opinion that public participation altered the amount of time to completion of an IDP application. The responses were similar to those presented by the chemical companies, the government departments, and the agency.

5.7.3 External Influences on Time to Completion of Process

Thirteen respondents stated that the external influences on the length of time to permit completion were beyond the control of the chemical companies; six respondents recorded no external influences. The external influences identifies were: a "communication problem", legislated times, O.C.s, other permits, such as EIAs and municipal development permits, holding up applications to hear them at the same time, "a 30 day waiting period for notice of intervention" from AEP that the EUB follows, and the compilation and revision of information by a consultant.

All EUB and three of the ED and T and AEP respondents provided similar responses to those presented by the companies. The respondents were in agreement that external forces affect time to completion. Some of the external forces mentioned by the agency and the departmental respondents were: "the workload in the ERCB and the Environmental Protection Department", "time the government takes to review a project", "application deficiencies", and "summer recess" of cabinet.

The majority of interest group respondents (3) agreed that external forces influenced the length of time to hearing completion. One responded did not agree with this conclusion. The external forces affecting time to hearing completion were identified as: "companies approach to dealing with issues raised", "government and industry refusal to recognize land as a resource", and "hearings are not forecastable".

5.8 Existence of the IDP Process

The majority of company respondents (17) stated that the IDP process should exist; four individuals did not agree. Respondents felt that the process should exist as an integrated mechanism for "environmental and energy planning purposes" which would provide a method for "sharing resources or allocating them on a fair basis and ensuring the interests of the province were taken care of". This should occur because "the resources we are talking about are finite and should be permitted to be used in the most efficient way". Two individuals commented that the process should consider or be limited to environmental and social issues in the area with the inclusion of public participation. The future process should decrease the scatter of plants in order to prevent the inhibition of future development. Another comment was that the process was useful in that it created a level playing field where "submission requirements, and details available to the controlling agencies and the public are all at the same level" and could dissuade development "coming through the back door". The comments made by the individuals who did not support process existence were: no IDP process was necessary until such a time as the resource was limited or export permitting was in place; and if a similar permit and the O.C. were obtainable through the AEPEA approval process.

All the departmental, four of the interest group, and one of the EUB respondents were in favor of IDP process existence. One individual commented that there should be some level of regulation of the largest facilities in the province. The IDP process has

"some value from an economic development perspective", and provided ED and T with an opportunity to interact with companies and include conditions, such as complying with the Alberta Industrial Benefits Strategy and Alberta content. Additional comments were made about the requirement of efficient use of resources with consideration of environmental impacts and provision of the public with a vehicle to learn about the project and become involved if needed.

5.9 Conclusion

The results of the evaluation of the IDP process presented the opinions and perceptions of respondents from the regulatory agency, government departments, chemical companies and interest groups. The overall perception of the IDP process, determined through the examination of the data, was that the majority of the stakeholders were satisfied with the IDP process. However, it was ascertained that the stakeholders perceived that the IDP required updating in order to make the process more timely, efficient, and effective. The involvement of the chemical companies in an public participation process was considered to be beneficial in the continuing viability of the facilities in the communities. The costs incurred by the companies during the time to permit completion were divided into total, direct, and indirect costs. An average for the total, direct, and indirect costs was not determined in this evaluation, as some of the respondents did not know the costs incurred by the project and other responses were not comparable because the cost varied tremendously with the size of the project and type of permit. The interest groups incurred total, direct and indirect costs associated with

information collection and public hearings, with the costs being reported as highly variable. Some of the minor costs cited by the stakeholder groups were noted duplicated with the environmental approvals. The time required to complete an IDP application was difficult to record because most of the permits were issued in excess of 5 years previous to the evaluation. Some respondents considered the process to be lengthy; however, the responses were all within the range estimated by the EUB.

CHAPTER VI - DISCUSSION OF INDUSTRIAL DEVELOPMENT PERMIT EVALUATION RESULTS

6.1 Introduction

In the 1990s, governments, industry, and the public have been faced with a rapidly changing social and economic climate. In order to remain relevant and effective, government and industry policies, programs and regulations are being adapted to include concepts such as natural resource economics, sustainable development, quality management, and public participation. An example of such a regulation is the IDP process. The administrators of the IDP process have become aware that the role and function of the IDP, as conceived in 1974, may not be completely applicable in the chemical industry in the future. Therefore, the IDP has become one of the regulations which is faced with adapting its processes to meet the needs of the industry and the public within the current social and economic context.

In this chapter, the social and economic climate affecting Alberta in the 1990s will be outlined in order to set the context for further discussion. Following the contextualization of the social and economic climate in Alberta, the implications of the IDP survey results will be discussed in terms of the clarity of the process, the relevancy of the IDP process, the effectiveness and usefulness of public participation, the implications of costs incurred during the process, and the effect of time requirements of the IDP process.

6.2 The Social and Economic Context

The social and economic context of Alberta has been affected by numerous factors since the 1980s. The governments have been aware of the economic importance of exporting the country's natural resources, such as timber, natural gas, and agricultural crops, and maintaining good exporting relationships. To encourage the Canadian exports, Canada entered into GATT and NAFTA which decreased trade restrictions and aided in the globalization of federal and provincial economies.

After the period of economic growth in the 1970s and 1980s, the 1990s showed an economic downturn. The Canadian and Albertan governments have focused on reducing their budget deficits. The increasingly conservative mood in the country has been associated with governments who have reduced government spending, promoted deregulation, and downsized the public sector. In Alberta, this reality translated into the contraction of government departments, the reduction of direct regulation, and the encouragement of private industry self-regulation programs such as Responsible Care.

In addition to the economic changes prevalent in Canada and Alberta, an increase in social awareness, as exemplified by the institution of social impact assessments, and in public concern regarding environmental issues, such as air pollution, water quality, and noise, has become prevalent. Due to the economic downturn, the public have also expressed concerns regarding future availability and stability of employment, social programs, and healthcare. The heightened public awareness in these areas and decreasing

confidence in the government and industry has lead to increased public interest, in taking part in decision-making and influencing decision-makers, through individual interventions or action of non-governmental organizations. Public involvement has been encouraged by government and industry to reduce concerns and increase communication. In some cases, the public's concerns have been influential in encouraging government and industry to implement more environmentally focused activities and programs.

The consideration of reduction of federal and provincial regulatory systems and the increase in social awareness and public participation has prompted the examination of regulatory processes, such as the IDP, by governments, agencies, and independent individuals and organizations. In order to ensure that improvements to regulatory processes reflect the realities of the 1990s, perceptions of the relevant stakeholders are determined and applied within the aforementioned context. The examination of the clarity, relevancy, expediency, and costliness of the IDP process and the efficiency and effectiveness of its related public participation process have provided the relevant perceptions.

6.3 Clarity of Process

In order for the relevant stakeholders to provide sufficient, relevant, and useful information to the regulatory body, the process must be clearly defined, organized, and administered. Perceptions pertaining to the clarity of the IDP process were determined

through the examination of the planning of the process, the duplication of permit, processes or procedures, and the information required to complete applications.

6.3.1 Process Planning

The plan of a process can be described as the organizational system of the process and the mechanisms by which the outlined activities are carried out. The examination of process planning was important because the requirements of the process need to be organized in such a manner as to provide a clear interface between the regulators and the regulated. The regulators should ensure that the procedural requirements are defined, information is transmitted efficiently, and industry, public, and government needs are met.

The clarity of the IDP process was considered to be important by the chemical industry for the provision of proper and sufficient information to the Board. A clearly specified process was considered necessary for company staff due to the mobility of individuals within the company. An individual is not designated solely to processing permits throughout the life of the facility. This lack of continuity requires that the process be documented in such a manner as to facilitate quick learning.

Some respondents considered the IDP permit application to be too detailed. However, the EUB and the government departments required a certain level of information in order to make an informed decision.

A clearly outlined IDP process would also enable the EUB to review complete applications and schedule formal public consultation; would aid companies to complete applications and begin production; and would assist the general public to gather relevant information and to prepare submissions. Despite the fact that company respondents recognized the need to integrate stakeholder preferences and concerns, the pressure of increased competition and production demands of an individual company on project development and permit approval made processing clarity and expediency primary concerns.

Company respondents also suggested that the efficiency of the permitting process would be increased if the information provided to the companies specified whether companies were able to proceed with planning, construction, or operation of their facilities. This information would be beneficial to the companies as it would enable them to maintain their competitive edge in the market. However, the extent of a company's ability to proceed with the planning stage would be dependent on the EUB's need to ensure the proposed facility or expansion was in the public's interest. A potential implication for the province regarding the company's competitiveness would be that the company may decide to invest elsewhere.

Another feature of the process which needed to be more clearly defined was the requirement of examining alternative sites. The purpose of the examination was to review

alternative sites for development which could provide the best balance of economic, social, and environmental benefits to the facility and to the local communities. This technique would also ensure that the facility would not be situated in a environmentally sensitive or economically unfeasible area.

Despite the fact that the EUB and the government gave credence to these benefits, the examination of alternative sites was one method which was established to encourage provincial diversification. In the current economy, construction at remoter sites may not be considered feasible in terms of chemical supply and product distribution. Environmentally based zoning restrictions and public outcry also limit site selection. These limits place greater consideration and demand on sites currently zoned for industrial development. Therefore, it may be useful to revisit the initial purpose of the alternative site requirement and determine its relevance in the current economic and social context.

6.3.2 Permit Duplication

Duplication of permits, processes, or specific procedures may affect the efficiency and effectiveness with which an applicant prepares an application, or an agency or government processes it. As the regulators are aware that such inefficiencies and overlaps exist, they have attempted to reduce or are in the process of decreasing the amount of duplication present.

The IDP permits contained some overlap with AEP environmental approvals. The respondents from the regulated companies perceived this overlap as reducing the efficiency and effectiveness of the IDP process by duplicating information requested, time, and expense.

Both the EUB and AEP have a responsibility to ensure all environmental concerns were considered. The EUB and the government departments of ED and T and AEP recognized this concern and have worked at coordinating the two processes and minimizing overlap. However, currently, the IDP cannot be approved without the consideration of environmental information. The minimization of overlap was a very timely subject in Alberta as the Alberta government was in the process of promoting deregulation and downsizing the public sector.

As the planned improvements in the coordination of the IDP and environmental processes have not been completely implemented, several suggestions made by survey respondents could be considered. The first suggestion was to place environmental information exclusively under the supervision of AEP, leaving energy use as the sole responsibility of the EUB. This modification would require that a communication system be developed between the regulating bodies to allow for either the transmittal of pertinent information or for the acknowledgment of the other agency's approval. The drawback to this suggestions would be that such a system would require substantial expense in

formulation and coordination which the current government does not have. Therefore, it was unlikely that this mechanism would be instituted in the near future.

The next best solution would be to leave the requirement of environmental information in the IDP while specifying the source. If an EIA was completed and an IDP was required, reference to EIA information on the IDP permit should be sufficient. However, if an EIA was not required by AEP, the EUB needs to ensure that environmental information was provided. This distinction should be clearly stated during the time when the companies met with the EUB, ED and T, or AEP to initiate an application process.

6.3.3 IDP Information Requirement

The information required in permit applications needs to be clearly defined in order for an applicant to complete an application as efficiently as possible. The IDP process enabled the applicant to receive an outline of requirements prior to beginning the process.

The respondents frequently commented that the amount of information required for the initial, expansion, or amendment applications was not clearly specified. Clearly defining the information requirement for the applications could increase the efficiency of application completion for the companies and the EUB. In the future, the specific level of detail for the different applications would need to be determined.

The level of detail in initial and amendment permits should be clearly specified to companies at the time of initial telephone contact. The early dissemination of information would provide a clearer directive to companies as to the appropriate volume of information required in the permit. The individuals meeting with the EUB or ED and T would be provided with a Guide to Content because individuals, who were not previously involved with the process, may be drafting the application.

6.4 Relevance and Adaptation of IDP to Current Industry Needs

As the IDP was developed in 1974, the government and the industry had a different perception of the resource availability than what was available. A surplus of the hydrocarbons is considered to be present in the 1990s. As the basic intent behind the IDP remained unchanged, certain aspects of the legislation and the process need to be adapted to the social, economic, and political realities of the 1990s. Some of the potential adaptations have been identified as the need to streamline the IDP process, to increase EUB discretion, and to improve interaction with other regulatory processes. However, care should be taken in any future modifications to ensure that industry needs are met while maintaining a future supply of hydrocarbon resources and responding to social, economic, and environmental impacts.

Throughout the evolution of the IDP, feedback from the interested parties has lead to regulatory agency and the government departments streamlining the process. Any

future steps to streamline the process would continue to reduce time delays and cost to the companies, and increase the efficiency of the bureaucracy. Further improvements to the current IDP process were identified as altering the permit threshold value requirement and examining the need for the O.C..

Respondents suggested that the threshold values or exemption levels instituted should reflect current facility capacities. The selection of the appropriate exemption levels by the EUB would require careful consideration of the most reasonable alternatives. Three suggestions were derived from respondents comments: 1) maintaining the current threshold value; 2) increasing the current threshold value; or 3) using the EIA as a trigger for the IDP process.

As the first suggestion would maintain the status quo, the implications of the latter two suggestions must be seriously considered. Raising the threshold could result in an increased number of facilities receiving permit exemption status. In addition to raising the threshold value, an assessment of cumulative socio-economic and environmental impacts of each new facility would need to be considered to ensure proper use of hydrocarbon resources. The other suggestion was the use of the EIA as a process trigger. Using this trigger would subject only the environmentally sensitive facilities to an IDP. A negative aspect to the use of the EIA trigger would be that the impetus for the examination of the facilities would not be in the interest of energy use.

A reduction in the number of O.C.s processed by cabinet would also streamline the IDP process. Respondents suggested that reducing the frequency of this requirement would decrease the level of bureaucracy in the application process and shorten the time to permit completion. While a reduction in bureaucracy may be necessary, the government maintains the responsibility to be informed of the status of the chemical industry in the province. Therefore, permit applications requiring an O.C. would be limited to initial applications and major amendments. An O.C. would not be required for minor amendments or administrative changes to the permit.

In order to further assist the streamlining of the IDP process, the relevant legislation should be altered to allow the EUB to have more discretion in assigning conditions which would reflect the changing economic, environmental, and social needs of the residents of Alberta and of the regulated industry. The conditions would be added to company applications prior to the granting of permits.

Additional improvements to the IDP process, such as "one stop shopping" permit applications and coordinating the permitting of other hydrocarbon uses with the IDP, could increase the efficiency and effectiveness of the process. However, the initiation of such improvements would require discussion and agreements for long term cooperation between all stakeholders. These suggestions were not discussed in depth as they were beyond the initial scope of the research.

6.5 Public Participation in the IDP Process

6.5.1 Satisfaction with the Design of Public Participation in the IDP Process

Initiation of a public participation program has been recommended to all applicant companies by the EUB, in the Guide to Content, and by ED and T in order to obtain the reaction of interested or affected individuals (ERCB, 1981). Proactive communication and early informal involvement helped ensure that the company will operate in the public interest, will be accountable to the public, and will be accepted in the community. The public participation process was valued by the companies because the companies have become increasingly aware that the potentially affected public reside with them in their communities. In order to maintain good relations with the public, on a personal and professional level, the companies need to support open two-way communication which provides the public with a sense of involvement and mechanism for release of opinions, and allows the company to respond to and inform the public.

In addition to comments about satisfaction with public participation in the IDP process, some respondents suggested that the public participation process could be improved by focusing time and effort towards formal advertised public involvement during initial applications and major amendments. Although formal public participation proceedings could increase company satisfaction in dealing with the IDPs, concerns could be raised by the EUB and the public that the companies might channel all public participation efforts to the initial applications and major amendments. This is substantiated by the EUB's mandate of regulating in the public's interest. Therefore,

although concentration of effort on formal proceedings may be necessary, a base level of public involvement, which begins early in the application process, should be maintained in order to provide the public with a meaningful role in the IDP process. Any future changes to the public participation process would have to be clearly outlined in the Guide to Content or in the appropriate Acts and Regulations.

6.5.2 Satisfaction with Implementation of Public Participation in the IDP Process

Satisfaction with the implementation of the public participation process was determined through the perception of acceptance of the facility in the community, the prevalence of public interest, the method of contact with the public, and the availability and adequacy of information provided to the public. The acceptance of the facility in the community was the main factor influencing company behavior. The acceptance was found to be dependent on the company's record and commitment to responding to the public. The acceptance of the facility was seen in the public's increased willingness to discuss issues and concerns about the facility. The openness was more conducive to increased efforts for further communication. In order to maintain or increase the level of public acceptance, the companies would need to continue providing open and honest communication which responds to the public's needs.

With the awareness that communication needs to be a two-way process, the companies have attempted to provide and receive understandable information to and feedback from the public. The participation process has evolved because of the realization

that the company has a stewardship responsibility to the public and must educate them about the facility. Interest groups recognized that the differences in degree of information and feedback was company specific. However, the public must recognize that companies may be able to consider all concerns and comments but may not be able to substantially modify their activities, due to economic, environmental, and technological constraints.

6.5.3 Interventions and Objections

An indicator of the types of public interest is the number of objections and interventions received at the EUB. Public consultation was negligible in the early years of the IDP. In the late 1970s and 80s, public involvement increased significantly. This increase has been followed in recent years with a decrease in the overall number of interventions and objections received (MacDonald, 1996, personal communication). At the same time, there was an increase in public interest in the facilities, particularly in the environmental domain.

The decrease in interventions has most likely occurred due to an increase in interest group and public familiarity with the type of facility and its impacts. For example, the third or fourth facility in the province manufacturing the same product generally does not raise as great a concern about the chemical process, effects, and product by the public as the first facility introduced into an area. The decrease in concern would occur because the public had already received some information about the

environmental, public health, and economic effects of a facility and been able to monitor the effects for a period of time.

The primary focus of public concern has been environmental effects with subsidiary concerns related to public health and cumulative effects. Companies need to take into account issues raised and information presented by the public as the public may be presenting a different finding or need. This could occur because the interveners may have access to different research materials and personal contacts than do the companies. The information presented by the interveners could provide the companies with feasible, unexplored alternative solutions to public concerns.

According to the Energy Resources Conservation Act, interventions or objections can be filed by local interveners. A "local intervener" is:

> a person or a group or an association of persons who, in the opinion of the Board,
>
> (a) has an interest in, or
>
> (b) is in actual occupation of or is entitled to occupy
>
> land that is or may be directly and adversely affected by a decision of the Board in or as a result of a proceeding before it, but, unless otherwise authorized by the Board, does not include a person or group or association of persons whose business includes the trading in or transportation or recovery of any energy resource. (ERCA, 1980, Section 31(1))

The EUB, the majority of government, and some of the company respondents were aware of this definition. Some of the company and interest group respondents displayed a lack

of knowledge regarding the qualifications for intervener status. In order to ensure all interested parties are aware of the requirement of intervener status, the Board could include the stipulation in the Guide to Content. However, the onus would be on the applicant or intervener to be aware of the legislation. This could decrease any apprehension the companies may have with regards to dealing with objections and interventions and may enable companies to further their ongoing public participation activities.

6.5.4 Conflict Resolution within the IDP Process

Conflict resolution techniques have been developed to reduce interpersonal or interorganizational conflict or concerns. The techniques and levels implemented by different organizations reflects their individual needs. The usefulness of implementing various conflict resolution techniques has been seen upon comparison of the number of applications the Board receives for various permits and the number of applications which proceed to the hearing stage. The Board receives approximately 20,000 applications per year and only holds approximately 50 hearings (Mink, 1997, personal communication). The proportionately low number of formal adversarial proceedings provides a testimonial to the effectiveness of the informal conflict resolution techniques used wherein the interested parties meet and settle concerns. The use of informal conflict resolution techniques also increases the cost effectiveness of the regulatory process.

The public and interest groups tend to use a broad spectrum of conflict resolution techniques to promote their issues or concerns. Interest groups generally took a defensive stance, in an intervener situation, and frequently instituted conflict resolution techniques. Companies and regulatory agencies, on the other hand, implemented formal conflict resolution techniques in response to interventions which could not be settled through discussion. As the techniques employed were considered to be fairly effective, changes to the current method were deemed unnecessary.

6.6 Costs Incurred Through the IDP Process

The estimated costs incurred, primarily by the chemical companies and the interest groups, throughout the IDP process were those which were accumulated above the standard operating costs of the companies or organizations. These costs were generated either directly or indirectly. The direct costs were permit fees, contracted work, and intervener funding; while the indirect or in-house costs were often internally absorbed or incurred due to overlaps present with different permit processes.

6.6.1 Direct Costs

The direct costs to the chemical companies varied substantially depending upon whether the acquired permit was an original application, or a major or minor amendment. Despite the expense, the cost estimates were not considered excessive by the majority of the companies, the EUB, and the government departments. The company costs incurred by a single IDP permit could be considered a relatively minor expense when compared

with the millions of dollars invested in site development, expansion, or operation. The cost to the company might have played a greater role in the satisfaction with the permit process if the parameters of the research had extended to examine the total costs incurred by all permits required by companies.

The application fee was accepted as a standard form of administrative charge by an agency. Despite the low awareness of the permit fee, most company respondents expected an administrative charge. The lack of knowledge of the application fee could have been due to the fact that the fee was instituted on January 1, 1990 (MacDonald, 1996, personal communication). The fee had not been required of many companies as the majority of the companies have not applied for permits since 1989.

The interest groups were subject to a different set of direct costs than those recorded by the companies, the departments, or the agency. The direct costs incurred were associated with information collection for interventions or objections, and public hearings. These costs were variable and depended on the extent of work done by the interest group and type of organization. The variability in cost could also have been due to the small sample size.

As the interest groups rarely have a large financial reserve, the costs that were incurred by the interest groups need to be amassed by other means such as intervener funding, private donations, and memberships. As the source of intervener funding was

not asked of the respondents, the exact origin of all of the funds can not be ascertained. However, if an intervener applies to the EUB, the Energy Resources Conservation Act states that the EUB were responsible for making a reasonable award of costs to a local intervener whose financial needs were directly and necessarily related to the preparation and presentation of an intervention (Section 2(3)).

6.6.2 Indirect Costs

The indirect costs incurred by the companies, other than the duplication of permit costs, were not described in depth by the respondents. A possible reason for this was that the individuals responsible for the IDP permit applications were not responsible for the disbursement of project costs. The responsibility for the disbursement of costs might have been delegated to other individuals within the company. Another reason for the lack of knowledge of indirect costs was that specific records of costs and the cost of management time spent on the process were not kept long after permit completion.

The main indirect cost to focused on in the interviews and the questionnaires was the duplication of IDP permit costs with other permits. The majority of respondents considered there to be a duplication of permit costs. However, the amount duplicated was not specified as records were not kept by the respondent. The duplication of environmental information requested by EUB and AEP in their permit applications was frequently noted. The costs were often considered to be hidden costs, such as duplication of work and time, photocopying, and public involvement. The individuals who noted the

cost were in favor of reducing or eliminating the overlap. However, as the inclusion of environmental information has been deemed necessary by the Board, the applicants, in order to reduce internal duplication, should be conscious to provide only the necessary information or, if an EIA has been completed, to reference it in the application.

Although the EUB and AEP have attempted to coordinate the process in the past and during the introduction of AEPEA, greater integration when dealing with interveners could be proposed for the future. The knowledge of recent changes with respect to integration or its effectiveness was unknown to the majority of the companies because only two companies have proceeded through the newly coordinated process: the first in 1995 and the second in the first quarter of 1996 (MacDonald, 1996, personal communication). Both of the recent permits occurred after the collection of data from the interviews and questionnaires. Feedback from and knowledge of the new system of integration has not yet disseminated through other permitted companies.

6.7 Effect of Time Requirements

The time to complete the IDP was process driven. The majority of the respondents were satisfied with the length of time to complete the IDP process recognizing a number of factors which influenced the time required. Based on the results, it would be reasonable to expect an initial permit to take approximately 6 to 14 months to proceed through the regulatory process, depending on level of complexity and intervening factors, and approximately 3 to 6 months to complete an amendment. The interest group

respondents considered the length of time for the settlement of issues and/or permit hearing to be reasonable at a maximum of 8 weeks. These timelines could be shortened by approximately half, as proposed by the EUB, if all requirements were met and the application was processed efficiently. However, the reduction in time to completion would require intensive coordination of resources.

6.7.1 Factors Affecting Time to Completion

6.7.1.1 Public Participation

Public participation in the IDP process does not always affect the time to application completion. The number of interventions and objections may be reduced due to a continuous dialogue between the applicant and the public. However, situations do arise which lengthen the public participation process. An extended public participation process may occur because of the time required to accrue a level of detail required to substantiate positions with interveners, the time allotted for intervener responses, and the hearing scheduling.

Despite the difficulties which may arise from an extended public participation process, all respondents recognized the benefit of maintaining such a process. O'Riordan (1976) and Bush (1990) recognized that the resource development sectors have attempted to implement post-decisional or post-approval and planning stage public participation in order to ensure public concerns were acknowledged and dealt with. A reduction in the time to IDP process completion could be achieved by companies beginning their public

participation process shortly after meeting with the EUB or ED and T to begin the application for the IDP.

The movement toward earlier public involvement has been encouraged by the EUB and ED and T staff as outlined in early discussions with the company and as stated in the Guide to Content. Chapin and Deneau (1978), in Diduck and Sinclair, 1995, state that ..."the only choice facing government at all levels is whether to invite such participation at every stage of the decision-making process, in an atmosphere of cooperation, or whether to encounter participation after the fact, in an atmosphere of hostility"(p. 221-222).

6.7.1.2 External Forces

External forces were another set of factors which affect time to permit completion. The external forces related to the IDP process were the workload of the EUB and government departments and the deferral of decision to cabinet. The EUB and government departments recognize these problem areas and have attempted to meet the needs of the company. The company, within their internal time line, needs to recognize and allow for the inevitability/possibility of EUB or departmental staff having a heavier workload at a given point in time or that a submission for an O.C. could occur during cabinet recess. These factors would result in a slower processing time and cannot be controlled.

6.8 Conclusion

The IDP process continues to evolve in the light of new economic, social, and political realities in Alberta. The results gathered in this research reaffirm that the process has been beneficial in terms of chemical industry development, government regulation, and public involvement. The chemical industry is permitted to use hydrocarbon resources; the government is able to regulate and be aware of the extent of development in the province; and the public is able to raise concerns and have them addressed. Continued process evolution and updating will be needed to ensure that positive benefits are experienced by the stakeholders involved.

CHAPTER VII - CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

As government and industry policies, programs, and processes are adapted to the rapidly changing social and economic climate, an IDP process evaluation was conducted to determine whether the current process was meeting the needs of the public and private sectors, and society in general. In order to identify useful conclusions and recommendations, the satisfaction of the EUB, the Alberta government departments of ED and T and AEP, the chemical industry, and the interest groups with the efficiency and effectiveness of the IDP process and its concurrent public involvement process was determined. The following sections contain the conclusions and recommendations for the IDP process determined from the research process.

7.2 Conclusions

In order for the IDP to be a useful process, the research determined that IDP could be more effective. All EUB, ED and T, AEP, chemical company, and interest group respondents stated the necessity for the revision of aspects of the IDP process. The revisions have to ensure that the needs of the current and future stakeholders are met without contravening the process's mandate. Economic Development and Tourism, AEP, and chemical companies determined that the time to and cost of application completion needed to be streamlined; while the EUB and interest groups placed less emphasis on the factors of time and cost. The efficiency with which energy was used or products produced

were not a concern to the stakeholders other than the interest groups because of the recognition that regulations and market conditions dictated the efficient use of best available technology in company operations.

The specific conclusions of the research based on the objectives stated in Chapter I were:

1) The general literature review of regulations and regulatory processes and the historical overview of the IDP regulatory process determined the framework against which the current process was evaluated. **The mandate of the IDP has remained unchanged since 1974. However, certain aspects of the relevant legislation and the process need to be updated to adapt to new realities. The areas in which adaptation was determined to be necessary were streamlining of the process, clarifying EUB discretion, and improving interaction with other processes.**

2) The IDP process and stakeholder involvement was described for the period: 1974 to 1995. In the 1970s, a large number of chemical facilities were being proposed and the Government of Alberta required a mechanism for regulating industry development. In order to circumvent a potential future energy shortage, the IDP process was developed to assess and provide permits to companies which would use or produce gas or gas products as raw materials or fuel in any industrial or manufacturing operation in Alberta above a specified threshold. The

application was filed with, and evaluated and issued by the EUB through a stepwise process, in which ED and T, Energy, and AEP provided comment on application completeness. Throughout the IDP process, the companies were encouraged to initiate early informal public involvement processes in order to inform the affected communities and if required enter into formal public hearings.

3) The government departments of ED and T and AEP, the EUB, chemical companies, and interest groups were identified as the relevant stakeholders for the IDP process. Of the 24 chemical companies which have IDP permits, 13 companies, such as Shell Canada Limited, Dow Chemical Canada Inc., Agrium Inc., and Viridian Inc., in 16 locations were included in the research (Map 2). The interest group sample was selected based on two criteria: 1) the organization's name was mentioned in company, agency, or government literature, and EUB IDP decision reports and/or 2) the Alberta Environmental Directory (1995) listed land use issues as one of the issues of concern for the organization.

4) The main objectives and measurable goals were determined through conversations with government, agency, and select company representatives. The main objective of the IDP, as stated in 1974, was to provide a regulatory mechanism which allowed the government to ensure the maintenance and efficient use of hydrocarbon resources, in the interest of the public due to the perception of a future energy shortage. **However, as the perception of an energy**

shortage no longer exists, more emphasis has been placed on the promotion of increased public participation in the location of facilities. The goals of the IDP process, which stemmed from the main objective, were identified as:

a) orderly development;

b) public participation; and

c) benefits of development in Alberta.

5) The criteria, which were determined from the identified objective and goals, were used in the construction of the interviews and questionnaires. The criteria were:

a) **clarity of process** as determined through the grouping of responses related to process planning, permit duplication, and informational requirements and transmittal;

b) **relevancy and adaptability of the IDP process** as indicated by similar responses with respect to the regulation of hydrocarbon use, current legislation, Order in Council, and process improvements;

c) **perception of public participation** as determined by consolidating similar comments pertaining to the value of public participation, the understanding of and perception of interventions and objections, the degree of public involvement, the acceptance of facilities, common concerns, and conflict resolution;

d) **cost of the permit and application** as indicated through the examination the costs incurred by the process, the knowledge of a $1100 application fee, the existence and use of intervener funding, and the duplication of permit costs primarily with AEP approvals. The expected permit costs ranged from a few to tens of thousands of dollars for amendment applications to hundreds of thousands of dollars for initial applications.;

e) **time commitment involved in application completion** as determined by estimates of reasonable time to permit approval, the effect of public participation, and external influences on time to process completion. The time to permit approval were expected to be approximately six months for an amendment application and one to one and a half years for an initial application. Public participation and external influences were expected to lengthen the process by one month or more depending on the complexity and nature of the extension.

6) The level of satisfaction was determined for the four stakeholder groups. The satisfaction for each group was:

a) Government Departments of ED and T and AEP

The departmental respondents were **mostly satisfied (85%)** with the implementation and design of the IDP process. The process provided the government with a mechanism for interfacing with the chemical

companies to advise them on Alberta policies and desirable activities, such as the benefits of community involvement. The departmental respondents were in agreement that updating the process design within the current context should take place in the form of simplification or modification of the process.

b) Alberta Energy and Utilities Board

The Board respondents were **fairly well satisfied (75%)** with the implementation and design of the IDP process. As these respondents were integrally involved in the process and received comments from all of the other stakeholder groups, the EUB was more aware of the necessary changes to the process. These respondents provided the best estimate of the difficulty arising from and time needed for adapting the process and should be the orchestrators of future modifications.

c) Chemical Companies

The chemical company respondents were **moderately satisfied (70%)** with the implementation and design of the IDP process. Where dissatisfaction was voiced, comments related to process cost and expediency. The companies, due to competition and deadlines, emphasized that process adaptations should ensure that the process not create a delay in project development or facility modification.

d) Interest Groups

The interest group respondents were **mostly satisfied (85%)** with the public participation process within the IDP process. The interest groups recognized the increased effort of the company in involving the public but remained somewhat skeptical that the concerns the organization raised were implemented. However, their input in the public involvement process would continue.

Based on the above conclusions, several recommendations were made in the following section.

7.3 Recommendations

The results of the evaluation of the IDP process have indicated that, in general, the stakeholders are satisfied with and consider the majority of the IDP process to be beneficial to the management of hydrocarbon resources in Alberta but that improvements could be made. Eight key recommendations for improvements to the process were based on the results from the interviews and questionnaires.

1) The EUB, in consultation with all stakeholders, should initiate implementation of a comprehensive schedule for adapting the IDP process to the new realities, within the next six months.

The survey results indicate that the IDP process is not considered to be as up to date as it should be. A schedule should be established to orchestrate the step by step movement towards an improved process. The administrators should be responsible for the

schedule which would outline the changes to the IDP process. The suggested changes should be based on this research, individual experience, and additional stakeholder input.

2)Within the next year, facilitate better communication between the administrators and IDP participants through an effective and up-to-date communication system, such as a database or the internet.

An easily accessible and coordinated system of permit requirements, in addition to the Guide to Content, is necessary to increase the applicant's and the public's understanding of the requirements of the permit and issues surrounding the application. A computerized database or a database accessed through the internet should be considered as the medium for consolidating and distributing the information in the communication system. As the EUB is responsible for receiving the applications, they should be responsible for the design, implementation, and upkeep of the communication system which should operate through the EUB's homepage.

3) Administrators of the IDP process should, within one year, present to Cabinet amendments to relevant legislation, such as the Oil and Gas Conservation Act, in order to revise the legislation to suit the environment of the next decade.

Legislation outlines the function of the IDP process, the authority of its administrators, and the requirements for the applicants and interveners. Amendments to the current legislation are needed to ensure that the legislated requirements reflect the current and future needs of the regulators, the industry, and the public. As the proportion

of interest group representation was low in this evaluation, the EUB would need to determine whether an additional study into the general public opinion on this issue prior to proceeding with legislative changes would be necessary. The survey results identified three main areas within which legislative change might be useful. The areas are: the necessity of O.C.s; the examination currently specified threshold level; and the incorporation of flexibility in the discretion of the EUB.

4) The EUB, within two years, should update Guide G-25, the Industrial Development Permit Application Guide to Content.

The EUB has previously mentioned the necessity of updating the Guide. As the content of the Guide is determined by legislation, the completion of the necessary changes are dependent on the status of legislative amendments. The modifications should include: a description of the level of detail required in new, expansion, modification, or minor permit applications; an integration of the complementary work done with AEP; an identification of individuals able to present interventions or objections, as stated in the Energy Resource Conservation Act; and a reference to the application fee. The Guide to Content should also be adapted to facilitate delivery through the previously suggested communication system.

5) Within two years, the administrators, with input from chemical companies and the public, should reduce the duplication, as much as possible, between the IDP and the new processes under AEPEA.

The EUB, ED and T, and Energy, in concert with AEP, should coordinate the reduction of process duplication. Additional input should be requested from the different administrative bodies, as well as the companies and the public, to ensure that the reduction of duplication between the IDP and the AEPEA processes is comprehensive. Increasing the coordination between the processes would increase the efficiency and effectiveness of the IDP process in terms of information requirements, time, and cost.

6) The chemical companies should continue to encourage the public to participate in facility location and expansion decisions.

Chemical companies, to date, have maintained a proactive and open public involvement process. The presence of public involvement has lessened conflict, reduced the need for formal adversarial approaches, and decreased the need for public hearings which can delay the IDP process. These results are strong endorsements for companies to continue to conduct open houses, plant tours, and general public education programs to increase the public's understanding of the issues surrounding and to continue to mediate concerns related to a facilities activities.

7) Participants in the IDP process should be aware of the procedures and the decision-making processes used to determine facility location and to make operation or expansion decisions prior to submitting objections or interventions.

As companies and the public have been and will be involved in numerous permits and applications, they should ensure that their employees and representatives are informed, understand, and keep separate the distinctions between different permits and processes, such as the IDP and the EIA. It should be recognized that, although some of the information included in the document is common to both applications, the purposes behind different permits and processes are distinct. The participants should be aware of how decisions are made, who makes them, and when they are made.

8) Every five years, a formal external evaluation of the IDP process should be undertaken by the administrators to ascertain the efficiency and effectiveness of the process.

In five years, a formal external evaluation should be conducted to provide the EUB and the Government of Alberta with an indication of whether the recommendations from this research have been accomplished. The evaluation would allow for the addressing of any necessary changes or redirection in a timely manner. IDP evaluations should continue to be conducted at regular five year intervals throughout the life of the process in order to further improve the efficiency and effectiveness of the process.

7.4 Areas for Further Research

Areas for further study related to the IDP process were identified though this research. For example, a study could examine whether ethane exported through a new means, such as in a new pipeline, would be economic or would detract from further development, in the province of Alberta, when the new pipeline is built. This study would need to examine the level of regulations present for exporting hydrocarbons from Alberta, the effect of exporting on the cost of ethane in the province, relative to the Gulf Coast, and the availability of ethane within the province factoring in increased removal rates. This information would be useful to the government and to the chemical companies in terms of economic benefits and investment.

Another topic which warrants study pertains to the prevalence of public interest in Alberta surrounding industrial development. Comments in newspaper articles, reduced numbers of interventions received, and decreased attendance at public hearings suggest that formal public interest with regards to industrial development may be decreasing. However, the general public appears to remain as or be more concerned with environmental, health and safety issues over the past 20 years. As the actual extent of the general population's interest is not known, it may be useful to the government, the regulators, and industry to be aware of and able to target the areas of concern.

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Appendix A:

Three Additional Sections of Results Compiled

1.0 Function of Regulating Future Nonrenewable Hydrocarbon Resources

The majority of company respondents considered the function of the IDP, with regards to the future nonrenewable hydrocarbon resources, to be the same as those mentioned in sections 5.3.1.1 and 5.3.1.2. The comments which were not previously mentioned ranged from dealing with resource availability application by application, or on a contractual basis between the applicant and the supplier to having to accept that at some point Albertans will have to reduce their standard of living due to a lack of resources or product alternatives. Other comments were that the decisions guiding IDP were driven by competition and commercial risk as long as everyone else in the business and the citizens of Alberta were receiving a good price and best return were not compromised and were demonstrable. Also, if a reasonable level of resources was not demonstrable, the hydrocarbons were best left in the ground rather than facilities providing employment and reducing debts.

The two departmental respondents stated that the IDP could become a very visible mechanism for identifying long term feedstock and energy needs during a period of deregulation where contractual arrangements place the onus on companies to secure supplies and the legislation may need to be changed. A third respondent did not believe it was necessary to have any type of surplus test anymore because none exist for exports. The EUB respondents commented that it was up to the government to decide what was to be done with the legislation. The respondent recognized that "the world will eventually change around again - at some point in the future, we are going to be running out of

hydrocarbons and we are going to find ourselves in the same scenario they envisioned back in the 1970s. In which case the Act may be needed for the purpose for which it was originally intended".

The interest group respondents commented that the function of the IDP when dealing with nonrenewable hydrocarbons was to ensure the integration of economic and environmental concerns, while protecting the availability of future supplies for future provincial use. One respondent commented that this was a public policy issue and should apply fairly to all applicants.

2.0 Awareness of Operation or Expansion before Official Approval

The majority of company respondents (16) were unaware or did not have any direct knowledge of companies which proceeded with operation of a facility or expansion prior to receiving official approval. Four individuals stated that they were aware of such a situation. The respondents stated that they knew if they proceed with development, it would be at their own risk. However, several company respondents noted that they initiated engineering, site preparation, and ordering equipment. The companies initiated the development process because "if we failed to obtain projects because of delays we would still be in jeopardy because the .... Plant would slowly die from lack of interest". The EUB and departmental respondents recognized that some companies do go ahead with activities which are not subject to approval by the Board or AEP, such as site preparation work.

3.0 Data Availability

The respondents were asked if they perceived a need for a database which would provide them with information to complete permit applications. All but two of the company respondents responded that the database would be beneficial to the completion of IDP and other permit applications in file or computer form. Two individuals mentioned that this system would be useful to companies with no operating experience in Alberta. The company respondents who did not perceive any benefit had previously filed permits without a database and received good service from the appropriate staff.

The EUB and the departmental respondents agreed that certain data in a database would be beneficial, primarily to the companies, however, the question of database location, setup, and maintenance was raised. Two interest groups agreed that this would be a useful tool for companies and one individual did not agree. However, only one respondent considered that it would be a useful tool for the organization.

When asked what they thought the database should contain, the majority of the company respondents felt that the database should contain information about the different types of permits and amendments required to permit a facility. Examples of permits and licenses suggested were: economic and environmental assessments, licenses to construct, licenses to operate, water use permits, and local permits. The detailed information to be contained in the database was knowledge of the responsible agencies, historical data on

energy consumption, stages at which permits were obtained, general timelines, permit specifics and headings, and questions to be answered. Suggestions were made for formatting of the database: 1) collated into a binder, 2) checklist, or 3) available on computer disk or file server wherein the application could be retrieved and submitted. The EUB and departmental respondents provided similar responses. Some additional recommendations provided were lists of existing projects cross-referenced by application number, contact individuals, cost estimates, facility locations, and technology. The interest group respondents suggested that information on cumulative effects and land base information should also be included.

Appendix B:

Letter of Consent and Cover Letters for Interviews and Questionnaires

Letter of Consent
for the Evaluation of the Industrial
Development Permit

I understand that I am a participant in an evaluation of the Industrial Development Permit process. This evaluation is being conducted by Orysia Dmytruk, a graduate student at the Natural Resources Institute, University of Manitoba. This project fulfills one of the requirements towards the completion of her Masters of Natural Resources Management (M.N.R.M.) program. The study is supported by a relevant government department, regulatory agency, and association, and several petrochemical companies.

I understand that the purpose of the study to evaluate the satisfaction of the relevant government departments, regulatory agencies, petrochemical companies, and interest groups and communities with the functioning of the Alberta Energy and Utilities Board regulated Industrial Development Permit process. I understand that my agreement to participate in the research study affirms my consent to be interviewed in order to obtain my general views on the Industrial Development Permit process and my specific views regarding the process steps, the communication between the parties, the related regulations, the public participation process, the costs incurred by the process, and the amount of time required to obtain the permit.

I understand that the anticipated length of the interview will be approximately one and one half (1 1/2) hours.

I also understand that a second component of the study, in which you will not participate, involves a mail-out questionnaire to communities and interest groups which are located in areas surrounding the petrochemical companies included in the study. The focus of this questionnaire will be to obtain information on the views with regards to the public participation process that has evolved in the communities where the companies are located.

I understand that the interview will be tape recorded to allow for complete capture of information by the investigator.

My participation in the interview is voluntary and I may choose not to answer any question or portion of questions during the interview or choose to withdraw from the interview at any time without penalty.

My identify will not be revealed and will remain anonymous unless I have authorized the use of specific references to myself or direct quotations from my interview text. Also, the information I will provide will remain confidential, unless I authorize otherwise.

I also understand that the results of the surveys will be compiled and used as part of the research towards the completion of the M.N.R.M. Practicum. Also, the Canadian Chemical Producers' Association will be using the survey as part of their evaluation of several Canadian regulatory processes. The final Practicum results will be made available to the Canadian Chemical Producers' Association, the Alberta Energy and Utilities Board, and the Alberta Department of Economic Development and Tourism for their consideration. The survey results, in a form of a summary of the Practicum, will be available to the petrochemical companies, interest groups, and communities, upon request.

I understand that if I require further information or clarification, I may contact Professor Thomas Henley or Dr. Walter Hensen at (204) 474-8373 or Orysia Dmytruk at (403) 427-2005 (office) or (403) 466-9467 (home).

I understand that by signing this letter of consent I am agreeing to the aforementioned conditions.

_____ _____

Date Interviewee

_____

Investigator

Cover Letter Sent to Interest Groups:
First Mailing
(Letter was sent on Natural Resources Institute letterhead)

October, 1995

«Title»«FirstName» «LastName»
«JobTitle»
«Company»
«Address1»
«Address2»
«City», «State»
«PostalCode»

Dear «Title» «LastName»:

The petrochemical industry is a significant component of the Alberta economy. Further growth of the industry is anticipated. Since 1974, new petrochemical developments have had to obtain an Industrial Development Permit in order to use hydrocarbon resources as feedstocks or fuel. The process has evolved into one that not only applies to efficient use of resources but also provides a vehicle for public participation in the plant location decision process.

I am undertaking a survey to obtain the views of the various stakeholders who have a vested interest in the Industrial Development Permit process. The survey seeks your views on several topics. The topics are: 1) the public participation process, 2) regulatory process as a whole and also as a focus on environmental issues, 3) current legislation, 4) process costs, and 5) time considerations. In addition to your participation, contributions from the relevant government departments, the regulatory agencies, the petrochemical industry, and other interest groups will also be gathered. Your views on the current process and suggestions for possible changes will assist me in making recommendations with respect to the current Industrial Development Permit process so that it meets the needs of today's society.

The questionnaire is being sent to interest groups in Alberta who have an interest in the region surrounding petrochemical companies. Of particular interest are your views on the public participation process that has evolved in the communities were the company has located. I am also interested in your comments about your perception of the other portions of the Industrial Development Permit process that you have been involved with.

The attached public participation questionnaire has been developed in consultation with staff from the Alberta Department of Economic Development and Tourism, the Canadian Chemical Producers' Association, the Alberta Energy and Utilities Board, and others to ensure that the questions being asked are representative of questions raised and views currently expressed by those who deal with the Industrial Development Permit process. The results of the survey will be compiled and used as part of the research required in order to complete my Masters of Natural Resources Management (M.N.R.M.) degree at the Natural Resources Institute, University of Manitoba.

An executive summary of the research project survey results will be available to the public, upon request, to assist you in better serving your community and in using the Industrial Development Permit process more effectively. Your participation in the survey would be greatly appreciated and would ensure that your views and suggestions for the process are considered in the recommendations on the current Industrial Development Permit process.

The success of the proposed survey is very dependent on your input. I would appreciate it very much if you could complete the questionnaire and return it to me by the end of January 1996 in the enclosed stamped envelope. The responses that you will give me will remain anonymous and will be kept confidential. The information collected will be used in an aggregated form in the research report. If you require more information or for clarification, please contact Professor Thomas Henley (204) 474-8373 or me (204) 474-8373 (office) or (204) 261-6122 (home).

Thank you for your assistance

Sincerely,

Orysia I.N. Dmytruk

Return Address: Natural Resources Institute
University of Manitoba
70 Dysart Road
Winnipeg Manitoba
R3T 2N2

Cover Letter Sent to Interest Groups:
Second Mailing
(Letter was sent on Natural Resources Institute letterhead)

February, 1996

«Title»«FirstName» «LastName»
«JobTitle»
«Company»
«Address1»
«Address2»
«City», «State»
«PostalCode»

Dear «Title» «LastName»:

In December 1995, a questionnaire asking for your perceptions of the Industrial Development Permit process was sent out to your organization. Perhaps the questionnaire was mislaid or misdirected in the mail, as can happen, and therefore, you have not had the opportunity to express your opinions about the process. I would appreciate it if you could find the time to complete the attached questionnaire and return it to me by the end of April 1996 in the enclosed stamped envelope, if you have not already done so. If your organization has already returned a completed questionnaire to me, please disregard the above request for mailing your responses.

Your views on the public participation process and any other comments about other portions of the process, in the region surrounding petrochemical companies, are of particular interest to me. In addition to your participation, contributions from the relevant government departments, the regulatory agencies, the petrochemical industry, and other interest groups will be gathered. The views you provide, on the process and suggestions for possible changes, will assist in making recommendations, with respect to the current Industrial Development Permit process, so that the process remains efficient and effective and relevant to society's needs.

The success of the survey is dependent upon your input. The responses that you will provide will remain anonymous and will be kept confidential, as the information collected will be used in an aggregated form in the research report. If you require more information or for clarification, please contact me (204) 474-8373 (office) or (204) 261-6122 (home) or Professor Thomas Henley (204) 474-8373.

Thank you for your assistance

Sincerely,

Orysia I.N. Dmytruk

Return Address: Natural Resources Institute
University of Manitoba
70 Dysart Road
Winnipeg Manitoba
R3T 2N2

Appendix C:

Company Interview Questions

INDUSTRIAL DEVELOPMENT PERMIT
INTERVIEW ANSWERS FROM
PETROCHEMICAL COMPANIES

General Opinion

1. Your company has dealt with the IDP permits in the past. What are the benefits and/or values of the process?
   20/21❑ ANSWER ❑ NO ANSWER 1/21 ❑ DON'T KNOW

2. What, if any, are the drawbacks of the IDP process?
   20/21❑ ANSWER ❑ NO ANSWER 1/21 ❑ DON'T KNOW

3. In your opinion, what is the role if the IDP process?
   19/21 ❑ ANSWER 1/21 ❑ NO ANSWER 1/21 ❑ DON'T KNOW

4. In general, what can be done to improve the IDP process?
   16/21 ❑ ANSWER 1/21 ❑ NO ANSWER 3/21 ❑ DON'T KNOW

5. Ultimately, do you think that the IDP process should exist?
   17/21 ❑ YES 4/21❑ NO ❑ ANSWER ❑ NO ANSWER
   ❑ DON'T KNOW

Process Clarity

1. When was you company made aware of the requirement of obtaining an IDP?
   17/21❑ ANSWER ❑ NO ANSWER 4/21 ❑ DON'T KNOW

2. When your company approached the AEUB with the intent to construct or expand a facility, were the requirements for the IDP process clearly stated?
   13/21 ❑ YES 2/21 ❑ NO ❑ ANSWER 2/21 ❑ NO ANSWER
   4/21 ❑ DON'T KNOW

3. Was the initial information provided to you, such as in the Guide to Content, sufficient to complete the permit application?
11/21 ❑ YES 3/21❑ NO ❑ ANSWER ❑ NO ANSWER
7/21❑ DON'T KNOW

IF NO: What type of information is required?

4. Was an appropriate level of detail required by the AEUB in the application necessary in all permit applications? E.G. WAS THE SAME AMOUNT AND TYPE OF INFORMATION REQUIRED FOR BOTH ORIGINAL APPLICANTS AND AMENDMENTS OF DIFFERENT TYPES?
11/21❑ YES 5/21❑ NO ❑ ANSWER 1/21❑ NO ANSWER
4/21❑ DON'T KNOW

5. In a permit application, did the AEUB ask the necessary questions in order to obtain application information which was as complete as possible from your company?
15/21❑ YES 1/21❑ NO ❑ ANSWER ❑ NO ANSWER
5/21❑ DON'T KNOW

6. Have you been directly involved in any permit applications?
16/21❑ YES 5/21❑ NO ❑ ANSWER ❑ NO ANSWER
❑ DON'T KNOW

IF INVOLVED: How were you involved and how did you perceive the permit process to proceed/ please state the type of application being described (I.E. REDUNDANCIES IN INFORMATION REQUESTED, TOO DETAILED OF INFORMATION REQUESTED, ETC.)
How are you involved?

How did you perceive the permit process to proceed?
IF NOT INVOLVED: What was your role regarding the permit?

7. An Order in Council signed by the Lieutenant Governor in Council is currently required in order to authorize all permit types.

a)Should all permits be required to receive an authorization by Order in Council?
1/21❑ YES 16/21❑ NO ❑ ANSWER ❑ NO ANSWER
4/21❑ DON'T KNOW

b)Which permit types, such as operation, amendment, or name change, should or should not and why?
17/21❑ ANSWER 1/21❑ NO ANSWER 3/21❑ DON'T KNOW

8. Currently, the Alberta Energy and Utilities Board provides companies with an IDP Guide to Content to assist in application completion, However, a comprehensive database which contains information such as the necessary permits a company requires to construct and maintain a facility and an estimate of the length of time for completion of different types of permits does not exist.

a) Would it be beneficial to have such a database available?
21/21❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

b) What type of information should be included?
18/21❑ ANSWER 2/21❑ NO ANSWER 1/21❑ DON'T KNOW

9. In Alberta, in order to operate or expand operations, many permit applications are required. With respect to the IDP and other required permits for operations of a facility, is the current method of permit application satisfactory?
6/21❑ YES 12/21❑ NO ❑ ANSWER ❑ NO ANSWER
3/21❑ DON'T KNOW

a) Are overlaps present between permits?
16/21❑ YES 3/21❑ NO ❑ ANSWER ❑ NO ANSWER
2/21❑ DON'T KNOW

IF YES: If known, where would the overlaps be?
12/21❑ ANSWER 8/21❑ NO ANSWER 1/21❑ DON'T KNOW

b) What should be done about the overlaps?
16/21❑ ANSWER 5/21❑ NO ANSWER ❑DON'T KNOW

10. a) As both the Environmental Impact Assessment (EIA) and the IDP processes required environmental information to complete the application, to what extent should the environmental issues be dealt with under the jurisdiction of the IDP?
18/21❑ ANSWER 1/21❑ NO ANSWER 2/21❑ DON'T KNOW

b)Is the overlap in the environmental information in the EIA and IDP dealt with efficiently?
5/21❑ YES 7/21❑ NO ❑ ANSWER 4/21❑ NO ANSWER
5/21❑ DON'T KNOW
Why or Why not?

Process Relevance

1. The IDPs, as legislated by the Oil and Gas Conservation Act in 1974, are to be granted only if, in the public's best interest, the energy is used efficiently without waste and is used to ensure the present and future availability of hydrocarbons in Alberta. This future availability was defined as maintaining a 30 year hydrocarbon reserve. Due to the current perception that there is no shortage of resources, some individuals think that the legislation needs to be altered to reflect a change in perspective about resource availability, while others do not.

   a) In this context, what should be the function of the IDP when dealing with the future supply of nonrenewable hydrocarbon resources?
   21/21 ❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

   b) Do you think the Act, in its present form, is still relevant given the change in perspectives on resource availability?
   5/21❑ YES 9/21❑ NO 2/21❑ ANSWER 2/21❑ NO ANSWER
   3/21❑ DON'T KNOW
   IF NO: How should the Act be changed?

2. Should the current legislation be altered to allow the Alberta Energy and Utilities Board to focus on the changing needs of the industry? (I.E. FOLLOWING IN THE FOOTSTEPS OF THE OIL SANDS ACT WHICH INCLUDES A CLAUSE WHICH ALLOWS THE BOARD TO PRESCRIBE APPROPRIATE CONDITIONS)
   13/21❑ YES 1/21❑ NO ❑ ANSWER 1/21❑ NO ANSWER
   6/21❑ DON'T KNOW
   Why or Why not?

3. In addition to the types of projects that should be subject to the permits, there has been some discussion as to whether the threshold levels, as specified in the Act, are reasonable. It has been suggested that the threshold could be higher or lower than the current level or could depend on a external trigger, such as Environmental Protection's EIA.

a)What do you think would be an effective way of regulating hydrocarbon use in Alberta?
15/21❑ ANSWER ❑ NO ANSWER 6/21❑ DON'T KNOW

b)What should be the criteria used in regulating hydrocarbon resources?
11/21❑ ANSWER 4/21❑ NO ANSWER 6/21❑ DON'T KNOW

[FOR THOSE WHO NEED TO BE INFORMED OF WHAT THE CURRENT THRESHOLD REQUIREMENTS FOR APPLICATION FOR AN IDP ARE: THE QUANTITY OF HYDROCARBON ENERGY RESOURCE USED IN A YEAR AS A RAW MATERIAL OR FUEL OR BOTH IN THE INDUSTRIAL OR MANUFACTURING OPERATION WHICH CAN NOT EXCEED 1 PETAJOULE, AND THE QUANTITY OF ENERGY IN THE ENERGY RESOURCE USED IN THAT YEAR WAS A RAW MATERIAL IN THE INDUSTRIAL OR MANUFACTURING OPERATION DOES NOT EXCEED 100 TERAJOULES, AS STATED IN THE COAL AND GAS CONSERVATION ACT]

Public Review

1. What is the value of public participation? [WHAT IS IT DESIGNED TO ACHIEVE?]
20/21❑ ANSWER ❑ NO ANSWER 1/21❑ DON'T KNOW

2. Has the public's increased interest in environmental concerns or issues affected the manner in which your company has dealt with the IDP process?
13/21❑ YES 8/21❑ NO ❑ ANSWER ❑ NO ANSWER
❑ DON'T KNOW
Why or Why not?; IF YES: How?

3. Which types of concerns are most common?
21/21❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

4. Currently, a public participation process is required for new projects. In addition to this consultation, it is required that any amendments made to the permit must also allow for the admission of objections and/or interventions. Some people are of the view that the public participation process should continue to play a part in all permits, while others believe that only major amendments and initial applications should be

subject to a formal public participation process. What is your opinion in this issue?
21/21❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

5. Due to the companies sharing of information with the public and listening to the public's concerns about the facility, its operation, and plans, the companies have built an accountability with the public. How does this accountability affect the acceptance of the facility in the community?
20/21❑ ANSWER ❑ NO ANSWER 1/21❑ DON'T KNOW

6. a) Who can present an intervention or objection?
17/21❑ ANSWER 2/21❑ NO ANSWER 1/21❑ DON'T KNOW

b) Who should intervene or object?
20/21❑ ANSWER ❑ NO ANSWER 1/21❑ DON'T KNOW

7. What would be the purpose of a company presenting an intervention?
20/21❑ ANSWER ❑ NO ANSWER 1/21❑ DON'T KNOW

8. Has public interest in the company and in voicing opinions remained as prevalent as it was during the initial permit application? [IN REFERENCE TO THE RESPONSE IN TERMS OF INTERVENTIONS, OBJECTIONS, OPEN HOUSE RESPONSES...]
7/21❑ YES 7/21❑ NO ❑ ANSWER 1/21❑ NO ANSWER
6/21❑ DON'T KNOW
Why or Why not?

9. To what extent (and at what stage) have you and do you employ lawyers and other legal services in the IDP process?
20/21❑ ANSWER ❑ NO ANSWER 1/21❑ DON'T KNOW

10. a) What method or methods does your company employ for conflict resolution?
20/21❑ ANSWER ❑ NO ANSWER 1/21❑ DON'T KNOW

b) To what extent is/are these methods used?
14/21❑ ANSWER 5/21❑ NO ANSWER 2/21❑ DON'T KNOW

11. a) In what manner does your company inform or maintain contact with the public?

- ❑Newspaper Advertisements
- ❑Newsletters
- ❑Open Houses
- ❑Plant Tours
- ❑Meetings with Community
- ❑Formal Public Advisor Groups
- ❑Other (please specify)_____

b) Does your company provide feedback to the public about what is being done to deal with the concerns the public has raised in objections and/or interventions?
18/21❑ YES ❑ NO 1/21❑ ANSWER 1/21❑ NO ANSWER
1/21❑ DON'T KNOW

c) Do you consider the feedback to be sufficient?
17/21❑ YES 1/21❑ NO ❑ ANSWER 3/21❑ NO ANSWER
❑ DON'T KNOW

d) Is the information presented in such a way that it is understood by the general public?
20/21❑ YES 1/21❑ NO ❑ ANSWER ❑ NO ANSWER
❑ DON'T KNOW

12. Does your company want continued feedback from the public as to their perceptions of what the company is doing?
21/21❑ YES ❑ NO ❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

Fees for Permits

1. a) From your company's point of view, what is the total cost for the IDP application? If exact figures are not available, please estimate to the nearest $1000.
9/21❑ ANSWER 3/21❑ NO ANSWER 9/21❑ DON'T KNOW
$_____

b) Into what categories would you break the costs down (both direct and indirect costs)?

Please provide dollar estimates if possible
For example:

Permit application fee	$_____
Contracted Work	$_____
Cost of preparing the application	$_____
Cost of hearings	$_____
Cost of in-house labor	$_____
Public Relations costs	$_____
Other (please specify)	$_____

2. a) In examining the permits costs, was there a duplication of costs with other permits, i.e. EIA?
17/21❑ ANSWER 2/21❑ NO ANSWER 2/21❑ DON'T KNOW

b) What would the duplication have been?
8/21❑ ANSWER 9/21❑ NO ANSWER 4/21❑ DON'T KNOW

3. a) Does a permit application fee exist?
10/21❑ YES 1/21❑ NO ❑ ANSWER ❑ NO ANSWER
10/21❑ DON'T KNOW
IF YES: What is it?

b) In advance of or at the time of application, was your company made aware of a standardized fee?
6/21❑ YES 4/21❑ NO ❑ ANSWER 2/21❑ NO ANSWER
9/21❑ DON'T KNOW

4. Would reducing the overlaps between the permits required by your company allow for a reduction in the total cost of the permit applications?
17/21❑ YES 4/21❑ NO ❑ ANSWER ❑ NO ANSWER
❑ DON'T KNOW

IF YES: Which combinations would be useful?
IF NO: Why not?

Timeframes

1. If known, how much time do the main steps of the IDP process take to be completed? If possible please refer to the most recent permit or amendment undertaken by the

company or, if it is not the most recent permit, please specify whether the permit to be discussed is an original or an amendment. [FOCUS PRIMARILY WITH THE AREAS THAT YOU DEAL WITH]
9/21❑ ANSWER 5/21❑ NO ANSWER 7/21 ❑ DON'T KNOW

a) permit name _____ Permit type_____

b) Activity Time Taken
Initial contact with the AEUB for application_____
Time to submission of application_____
AEUB registers application_____
Review of application by AEUB_____
Referral for Advice from departments_____
Receipt of advice from departments_____
Deficiency material requested by AEUB_____
Deficiency material received by AEUB_____
Total time for public participation process_____
Notice of hearing_____
Last day for objections_____
Length of time for hearing_____
Report issued_____
AEUB sends draft of O.C. to the EDT dept. for recommendation____
Dept. notifies Minister of IDP and request for O.C. _____
O.C. recommendation signed by Minister_____
Submission of O.C. to cabinet by Minister of EDT_____
O.C. Signed by Lieutenant Governor in Council
and Granted in Cabinet (Order issued)_____
AEUB receives O.C._____
AEUB issues permit to company_____
Other (please specify)_____

2. Are/were there external forces which influence the length of time to completion that are/were beyond the control of your company? (i.e. other permit applications, etc.)
13/21❑ YES 6/21❑ NO ❑ ANSWER ❑ NO ANSWER
3/21❑ DON'T KNOW

IF YES: What were they?

3. a) Do you consider the length of time for the completion of the permit, from application to final approval, to be reasonable? Reasonable time, in this instance, is defined as the time required to complete all necessary steps without delaying the project unnecessarily.
12/21❑ YES 6/21❑ NO ❑ ANSWER ❑ NO ANSWER

3/21❑ DON'T KNOW

IF YES: What is it?
IF NO: What should it be?

b) If the timeframe for permit completion was too long, what would you suggest could be done to shorten the time required?
15/21❑ ANSWER ❑ NO ANSWER 6/21❑ DON'T KNOW

c)Is the timeframe suggested realistic considering the steps of the permit process can only proceed if the previous step has been completed?
13/21❑ YES 3/21❑ NO ❑ ANSWER 1/21❑ NO ANSWER
4/21❑ DON'T KNOW
Why or Why not?

4. a) Has the public participation process altered the amount of time required to complete an application?
9/21❑ YES 9/21❑ NO ❑ ANSWER ❑ NO ANSWER
3/21❑ DON'T KNOW

b) How has it been affected?

5. Are you aware of any instanced in which or have had any direct experience where your company or other companies have proceeded with the operation of a facility or an expansion prior to receiving official approval?
4/21❑ YES 16/21❑ NO ❑ ANSWER ❑ NO ANSWER
1/21❑ DON'T KNOW

IF YES: What were the circumstances surrounding the event?

6. In 1991, the ERCB undertook a study to see how the IDP process could be improved. One of the proposals made in the study suggested that, for administrative and minor changes, a short process which bypasses unnecessary steps for smaller amendments and long process for major changes and new application should exist.

a)Would the time to permit completion and the process, in general, be more efficient if the short and long processes were adopted?
20/21❑ YES 1/21❑ NO ❑ ANSWER ❑ NO ANSWER
❑ DON'T KNOW
Why or why not?

b) Do you have any other suggestions?
14/21❑ ANSWER 6/21❑ NO ANSWER 1/21❑ DON'T KNOW

Demographic Information

1. Name_____(last name first)
2. Agency/Department and Location_____
3. Length of time employed by the agency/department _____(years)
4. Current position _____
5. Length of time in current position_____(years)
6. Have you dealt directly with any permit application? ❑YES ❑NO
   IF YES: How recent was the experience? _____(years)
   How were you involved?_____
   _____
   IF NO: How were you involved? _____

A COPY OF THE FULL RESPONSES TO THE CHEMICAL COMPANY INTERVIEWS ARE AVAILABLE FOR PERUSAL AT THE NATURAL RESOURCES INSTITUTE, UNIVERSITY OF MANITOBA.

Appendix D:

Agency and Government Department Interview Questions

INDUSTRIAL DEVELOPMENT PERMIT
ANSWERS FROM EUB AND GOVERNMENT
DEPARTMENT INTERVIEWS

Italic text: Departmental Responces
Normal text: EUB Responces

General Opinion

1. The AEUB/Department of EDT /AEP currently deals with the IDP permits. What are the benefits and/or values of the process?
   2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
   4/4

2. What, if any, are the drawbacks of the IDP process?
   2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
   3/4 *1/4*

3. In your opinion, what is the role if the IDP process?
   2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
   4/4

4. In general, what can be done to improve the IDP process?
   2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
   3/4 *1/4*

5. Ultimately, do you think that the IDP process should exist?
   1/2 ❑YES 1/2 ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
   4/4

Process Clarity

1. When do you make the company aware of the requirement of obtaining an IDP?
   2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
   3/4 *1/4*

2. When a company approached the AEUB/Department with the intent to construct or expand a facility, were the requirements for the IDP process clearly stated?

1/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER 1/2 ❑DON'T KNOW
2/4 *1/4* *1/4*

3. Is the initial information provided to you, such as in the Guide to Content, sufficient to complete the permit application?

1/2❑YES 1/2 ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
2/4 *1/4* *1/4*

IF NO: What type of information is required?

4. Is an appropriate level of detail required by the AEUB in the application necessary in all permit applications? E.G. WAS THE SAME AMOUNT AND TYPE OF INFORMATION REQUIRED FOR BOTH ORIGINAL APPLICANTS AND AMENDMENTS OF DIFFERENT TYPES?

2/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
1/4 *1/4* *2/4*

5. When applying for a permit, do the companies make their informational needs known?

2/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
2/4 *1/4* *1/4*

6. Have you been directly involved in any permit applications?

2/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
2/4 *2/4*

IF INVOLVED: Please state the type of application being described
How involved?

How did you perceive the process to proceed? (I.E. REDUNDANCIES IN INFORMATION REQUESTED, TOO DETAILED OF INFORMATION REQUESTED, ETC.)

IF NOT INVOLVED: What was your role regarding the permit?

7. An Order in Council signed by the Lieutenant Governor in Council is currently required in order to authorize all permit types.
a) Should all permits be required to receive and authorization by an Order in Council?
❑YES 2/2 ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
1/4 *3/4*

b) Which permit types, such as operation, amendment, or name change, should or should not and why?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
3/4 *1/4*

8. Currently, the Alberta Energy and Utilities Board provides companies with an IDP Guide to Content to assist in application completion, However, a comprehensive database which contains information such as the necessary permits a company requires to construct and maintain a facility and an estimate of the length of time for completion of different types of permits does not exist.
a) Would it be beneficial to have such a database available?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

b) What type of information should be included?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

9. In Alberta, in order to operate or expand operations, many permit applications are required. With respect to the IDP and other required permits for operations of a facility, is the current method of permit application satisfactory?
1/2 ❑YES 1/2 ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
1/4 *1/4* *1/4* *1/4*

a) Are overlaps present between permits?
1/2 ❑YES 1/2❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

IF YES: If known, where would the overlaps be?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

b) What should be done about the overlaps?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

10. a) As both the Environmental Impact Assessment (EIA) and the IDP processes required environmental information to complete the application, to what extent should the environmental issues be dealt with under the jurisdiction of the IDP?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

b) Is the overlap in the environmental information in the EIA and IDP dealt with efficiently?
1/2 ❑ YES ❑NO ❑ANSWER 1/2 ❑NO ANSWER ❑DON'T KNOW
2/4 *1/4* *1/4*
Why or Why not?

Process Relevance

1. The IDPs, as legislated by the Oil and Gas Conservation Act in 1974, are to be granted only if, in the public's best interest, the energy is used efficiently without waste and is used to ensure the present and future availability of hydrocarbons in Alberta. This future availability was defined as maintaining a 30 year hydrocarbon reserve. Due to the current perception that there is no shortage of resources, some individuals think that the legislation needs to be altered to reflect a change in perspective about resource availability, while others do not.
a) In this context, what should be the function of the IDP when dealing with the future supply of nonrenewable hydrocarbon resources?
2/2 ❑ANSWER ❑NO ANSWER ❑ DON'T KNOW
3/4 *1/4*

b) Do you think the Act, in its present form, is still relevant given the change in perspectives on resource availability?
1/2 ❑YES 1/2 ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
3/4 *1/4*

IF NO: How should the Act be changed?

2. Should the current legislation be altered to allow the Alberta Energy and Utilities Board to focus on the changing needs of the industry? (I.E. FOLLOWING IN THE FOOTSTEPS OF THE OIL SANDS ACT WHICH INCLUDES A CLAUSE WHICH ALLOWS THE BOARD TO PRESCRIBE APPROPRIATE CONDITIONS)

2/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW

3/4 *1/4*

Why or Why not?

3. In addition to the types of projects that should be subject to the permits, there has been some discussion as to whether the threshold levels, as specified in the Act, are reasonable. It has been suggested that the threshold could be higher or lower than the current level or could depend on a external trigger, such as Environmental Protection's EIA.

a) What do you think would be an effective way of regulating hydrocarbon use in Alberta?

2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW

3/4 *1/4*

b) What should be the criteria used in regulating hydrocarbon resources?

2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW

3/4 *1/4*

[FOR THOSE WHO NEED TO BE INFORMED OF WHAT THE CURRENT THRESHOLD REQUIREMENTS FOR APPLICATION FOR AN IDP ARE: THE QUANTITY OF HYDROCARBON ENERGY RESOURCE USED IN A YEAR AS A RAW MATERIAL OR FUEL OR BOTH IN THE INDUSTRIAL OR MANUFACTURING OPERATION WHICH CAN NOT EXCEED 1 PETAJOULE, AND THE QUANTITY OF ENERGY IN THE ENERGY RESOURCE USED IN THAT YEAR WAS A RAW MATERIAL IN THE INDUSTRIAL OR MANUFACTURING OPERATION DOES NOT EXCEED 100 TERAJOULES, AS STATED IN THE COAL AND GAS CONSERVATION ACT]

Public Review

1. What is the value of public participation? [WHAT IS IT DESIGNED TO ACHIEVE?]

2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW

4/4

2. Has the public's increased interest in environmental concerns or issues affected the manner in which a company deals with the IDP process?
1/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER 1/2 ❑DON'T KNOW
2/4 *2/4*
Why or Why not?; IF YES: How?

3. Which types of concerns are most common?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
2/4 *2/4*

4. Currently, a public participation process is required for new projects. In addition to this consultation, it is required that nay amendments made to the permit must also allow for the admission of objections and/or interventions. Some people are of the view that the public participation process should continue to play a part in all permits, while others believe that only major amendments and initial applications should be subject to a formal public participation process. What is your opinion in this issue?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

5. Due to the companies sharing of information with the public and listening to the public's concerns about the facility, its operation, and plans, the companies have built an accountability with the public. How does this accountability affect the acceptance of the facility in the community?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
3/4 *1/4*

6. a) Who can present an intervention or objection?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

b) Who should intervene or object?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

7. What would be the purpose of a company presenting an intervention?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
3/4 *1/4*

8. Has public interest in the company and in voicing opinions remained as prevalent as it was during the initial permit applications? [IN REFERENCE TO THE RESPONSE IN TERMS OF INTERVENTIONS, OBJECTIONS, OPEN HOUSE RESPONSES...]
1/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER 1/2 ❑DON'T KNOW
2/4 *1/4* *1/4*
Why or Why not?

9. To what extent (and at what stage) have you and do you employ lawyers and other legal services in the IDP process?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
3/4 *1/4*

10. a) What method or methods does the AEUB/Department employ for conflict resolution?
2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

b) To what extent is/are these methods used?
❑ANSWER 2/2 ❑NO ANSWER ❑DON'T KNOW
2/4 *2/4*

11. a) In what manner does a company (and your agency or department) inform or maintain contact with the public?
- ❑Newspaper Advertisements
- ❑Newsletters
- ❑Open Houses
- ❑Plant Tours
- ❑Meetings with Community
- ❑Formal Public Advisor Groups
- ❑Other (please specify)_____

b) Do(es) a companies(y) provide feedback to the public about what is being done to deal with the concerns the public has raised in objections and/or interventions?
2/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

c) Do you consider the feedback to be sufficient?
1/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER 1/2 ❑DON'T KNOW
2/4 *1/4* *1/4*

d) Is the information presented in such a way that it is understood by the general public?
1/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER 1/2 ❑DON'T KNOW
3/4 *1/4*

12. Do you want continued feedback from the public to the company as to the public's perceptions of what the company is doing?
1/2 ❑YES ❑NO ❑ANSWER 1/2 ❑NO ANSWER ❑DON'T KNOW
4/4

Fees for Permits

1. a) From your agency's/department's point of view, what is the total cost for the IDP application? If exact figures are not available, please estimate to the nearest $1000.
❑ANSWER ❑NO ANSWER 2/2❑ DON'T KNOW
4/4
$_____

b) Into what categories would you break the costs down (both direct and indirect costs)?
Please provide dollar estimates if possible
For example:
Permit application fee $_____
Contracted Work $_____
Cost of preparing the application $_____
Cost of hearings $_____
Cost of in-house labor $_____
Public Relations costs $_____
Other (please specify) $_____

2. a) In examining the permits costs, was there a duplication of costs with other permits, i.e. EIA?

1/2 ❑ANSWER ❑NO ANSWER 1/2 ❑DON'T KNOW

3/4 *1/4*

b) What would the duplication have been?

1/2 ❑ANSWER ❑NO ANSWER 1/2 ❑DON'T KNOW

1/4 *1/4* *2/4*

3. a) Does a permit application fee exist?

2/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW

2/4 *1/4* *1/4*

IF YES: What is it?

b) In advance of or at the time of application, is the company made aware of a standardized fee?

2/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW

2/4 *1/4* *1/4*

4. In order to provide a common perspective for comparison with other jurisdictions, is it necessary if there are or if there should be different cost categories for permit applications based on the degree of complexity of the project.

a) What is the current system for permit application fees?

2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW

1/4 *3/4*

b) Is it categorized?

❑YES 2/2 ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW

2/4 *2/4*

IF YES: What is the specific categorization, if known?

IF NO: Should it be categorized? or what other alternative system could be employed?

5. Would reducing the overlaps between the permits required by a company allow for a reduction in the total cost of the permit applications?

❑YES ❑NO ❑ANSWER ❑NO ANSWER 2/2❑DON'T KNOW

4/4

IF YES: Which combinations would be useful?
IF NO: Why not?

Timeframes

1. If known, how much time do the main steps of the IDP process take to be completed? If possible please refer to the most recent permit or amendment undertaken by the company or, if it is not the most recent permit, please specify whether the permit to be discussed is an original or an amendment. [FOCUS PRIMARILY WITH THE AREAS THAT YOU DEAL WITH]

1/2 ❑ANSWER 1/2 ❑NO ANSWER ❑DON'T KNOW
2/4 *2/4*

a) permit name _____ Permit type_____
b) Activity Time taken
Initial contact with the AEUB for application_____
Time to submission of application_____
AEUB registers application_____
Review of application by AEUB_____
Referral for Advice from departments_____
Receipt of advice from departments_____
Deficiency material requested by AEUB_____
Deficiency material received by AEUB_____
Total time for public participation process_____
Notice of hearing_____
Last day for objections_____
Length of time for hearing_____
Report issued_____
AEUB sends draft of O.C. to the EDT dept. for recommendation____
Dept. notifies Minister of IDP and request for O.C. _____
O.C. recommendation signed by Minister_____
Submission of O.C. to cabinet by Minister of EDT_____
O.C. Signed by Lieutenant Governor in Council
and Granted in Cabinet (Order issued)_____
AEUB receives O.C._____
AEUB issues permit to company_____
Other (please specify)_____

2. Are/were there external forces which influence the length of time to completion that are/were beyond the control of the company? (i.e. other permit applications, etc.)

2/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
3/4 *1/4*

IF YES: What were they?

3. a) Do you consider the length of time for the completion of the permit, from application to final approval, to be reasonable? Reasonable time, in this instance, is defined as the time required to complete all necessary steps without delaying the project unnecessarily.

2/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
3/4 *1/4*

IF YES: What is it?
IF NO: What should it be?

b) If the timeframe for permit completion was too long, what would you suggest could be done to shorten the time required?

2/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
3/4 *1/4*

c) Is the timeframe suggested realistic considering the steps of the permit process can only proceed if the previous step has been completed?

1/2❑YES ❑NO 1/2 ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
1/4 *1/4* *2/4*

Why or Why not?

4. a) Has the public participation process altered the amount of time required to complete an application?

1/2 ❑YES ❑NO 1/2 ❑ANSWER ❑NO ANSWER❑DON'T KNOW
4/4

b) How has it been affected?

5. Are you aware of any instanced in which or have had any direct experience with which companies have proceeded with the operation of a facility or an expansion prior to receiving official approval?

1/2 ❑YES 1/2 ❑NO ANSWER ❑NO ANSWER ❑DON'T KNOW
1/4 *2/4* *1/4*

IF YES: What were the circumstances surrounding the event?

6. In 1991, the ERCB undertook a study to see how the IDP process could be improved. One of the proposals made in the study suggested that, for administrative and minor changes, a short process which bypasses unnecessary steps for smaller amendments and long process for major changes and new application should exist.

a) Would the time to permit completion and the process, in general, be more efficient if the short and long processes were adopted?

2/2 ❑YES ❑NO ❑ANSWER ❑NO ANSWER ❑DON'T KNOW
4/4

Why or why not?

b) Do you have any other suggestions?

❑ANSWER 2/2 ❑NO ANSWER ❑DON'T KNOW
2/4 *2/4*

Demographic Information

1. Name_____(last name first)
2. Agency/Department and Location_____
3. Length of time employed by the agency/department _____(years)
4. Current position _____
5. Length of time in current position_____(years)
6. Have you dealt directly with any permit application? ❑YES ❑NO

IF YES: How recent was the experience? _____(years)
How were you involved?_____
_____

IF NO: How were you involved? _____

A COPY OF THE FULL RESPONSES TO THE GOVERNMENT AND AEUB INTERVIEWS ARE AVAILABLE FOR PERUSAL AT THE NATURAL RESOURCES INSTITUTE, UNIVERSITY OF MANITOBA.

Appendix E:

Interest Group Mail-Out Questionnaire

EVALUATION OF THE INDUSTRIAL DEVELOPMENT PERMIT PROCESS QUESTIONNAIRE 1995/1996

General Guidelines for Completing the Questionnaire

A. The questions are divided into **six sections** which deal with different aspects of the Industrial Development Permit process.

B. Please **follow the BOLDED AND CAPITALIZED directions provided** in each question; always proceed to the next question unless otherwise stated.

C. Answer the questions in the **space provided below** the question

Please do not answer questions that are not applicable to your organization

E. All questions contain boxes, if one applies please mark it with an 'X'.
For example: ☒ **YES** ☐ **NO** ☐ **NO ANSWER** ☐ **DON'T KNOW**

F. If the question contains a list of choices, please **mark the box(es) opposite the choice(s) that apply**.

G. Some questions require that numbers be entered. Please record your answer in the space provided. It is requested that the figures be **rounded to the nearest hundred.**
For example: **$ 1,000.00**

H. Please return your questionnaire in the **postage paid envelope**.

Please Read These Important Definitions

Alberta Energy and Utilities Board: The regulatory board which regulates oil and gas production and shipment as well as electric power rates and generation, and issues the Industrial Development Permits.

Energy Resources Conservation Board: The current Alberta Energy and Utilities Board.

Hydrocarbon: A chemical compound made up of only hydrogen and carbon.

Industrial Development Permit: A permit, for the use of Alberta-produced energy resources in any industrial or manufacturing operations in the province, applied for under the legislation of the Oil and Gas Conservation Act to the Alberta Energy and Utilities Board. Its issuance is subject to authorization by the Lieutenant Governor in Council.

Petrochemical: A substance that has been produced from petroleum (oil) or natural gas through an industrial process.

Demographic information (Please Print)

1. Please mark one: ❑Male ❑Female ❑ No Answer

2. Age:
❑ 0-18 ❑ 41-50 ❑ No Answer
❑ 19-24 ❑ 51-64
❑ 25-40 ❑ 65+

3. Education: Please mark the one(s) that apply.

❑ High School
❑ University Bachelors
❑ University Masters
❑ University Ph.D.
❑ Community College
❑ Technical Institute
❑ Other (please specify)_____
❑ No Answer

4. Type of Organization: _____

5. Length of time involved with the organization (years): _____

6. Current Position: _____

7. Length of time in current position (years):_____

8. Type of position (please mark applicable category(ies)):
❑full time ❑ part time
❑volunteer ❑ other (please specify) _____

9. Have you done public participation work related to Industrial Development Permits? (please mark one) ❑YES ❑NO

If yes: How recent was the experience?(years) _____
How were you involved? _____

If no: PLEASE RETURN QUESTIONNAIRE IN STAMPED ENVELOPE

Section A. **General Opinion**

The purpose of this section is to obtain your comments about your experience in dealing with Industrial Development Permits.

1. **The Industrial Development Permits, acquired by petrochemical companies from the Alberta Energy And Utilities Board, use public participation to give interested parties a chance to present their concerns.**

   a)Has your organization been involved in public hearings and other forms of communication with the Alberta Energy and Utilities Board and petrochemical companies?
   5/5❑ YES **(PROCEED TO QUESTION 1B)** ❑ NO **(PROCEED TO QUESTION 2)**
   ❑ NO ANSWER ❑ DON'T KNOW

   _____

   _____

   b) If yes, was it in response to an Industrial Development Permit application?
   5/5 ❑ YES **(PROCEED TO QUESTION 1C)** ❑ NO **(PROCEED TO QUESTION 2)**
   ❑ NO ANSWER ❑ DON'T KNOW

   _____

   _____

   c) If yes, what was the involvement?

   _____

   _____

2. **Based on your organization's experience with the Industrial Development Permit process, what do you see are the benefits of participation in the permit process? Explain.**
   5/5 ❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

   _____

   _____

3. **What, if any, are the drawbacks of public participation, with the Alberta Energy and Utilities Board and the petrochemical companies, for people who are involved in the Industrial Development Permit process? Explain.**
   5/5 ❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

   _____

   _____

4. **In your opinion, what is the role of public participation in the Industrial Development Permit process?**
5/5 ❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

5. **In general, what do you think can be done to improve public participation within the Industrial Development Permit process?**
5/5 ❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

6. **Based on what you have experienced with the Industrial Development Permit process, do you think it should continue to be administered in Alberta as a method of regulating the use of hydrocarbon resources? Explain.**
4/5 ❑ YES 1/5 ❑ NO ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

Section B. **Process Clarity**

The purpose of this section is to obtain your organization's perceptions of the clarity of the Industrial Development Permit process.

1. **a) Is your organization aware that a petrochemical company requires an Industrial Development Permit in Alberta to use or to increase use of hydrocarbon resources in their facilities? Explain.**
5/5 ❑ YES ❑ NO ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

b) What methods do you use to raise issues of concern to the petrochemical companies regarding operation or expansion of their facilities?
4/5 ❑ ANSWER 1/5 ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

2. **a) When your organization becomes aware of the plans to construct or expand a facility, are you informed of the petrochemical company's requirement of obtaining an Industrial Development Permit? Explain.**
4/5 ❑ YES **(PROCEED TO QUESTION 2B)** **1/5** ❑ NO **(PROCEED TO QUESTION 2C)**
❑ NO ANSWER ❑ DON'T KNOW

---

b) How did you find out about the requirements?
PLEASE MARK APPROPRIATE BOX(ES)

2/5 ❑ Newspaper Advertisements
1/5 ❑ Newsletters
2/5 ❑ Open Houses
❑ Plant Tours
1/5 ❑ Meetings with Community
❑ Publicly Accessed Company Phone Lines
2/5 ❑ Other _____

1/5 ❑ NO ANSWER ❑ DON'T KNOW

c) What type of information was made available to you? Explain.
4/5 ❑ ANSWER **1/5** ❑ NO ANSWER ❑ DON'T KNOW

---

3. **The <u>Industrial Development Permit Applications to the Energy Resource Conservation Board: A Guide to Content</u> is a document, published in 1981, which outlines the requirements necessary for petrochemical companies to complete an Industrial Development Permit application.**

a) Do you have access to A Guide to Content, published by the Alberta Energy and Utilities Board (the former Energy Resource Conservation Board)?
4/5❑ YES **(PROCEED TO QUESTION 3B)** **1/5** ❑ NO **(PROCEED TO QUESTION 4)**
❑ NO ANSWER ❑ DON'T KNOW

---

b) The Guide to Content contains information on government contacts and provides an introduction to the permitting process. It also contains an outline of the specific information required in the application: project description, technical, biophysical and social, and economic information.

Do you feel that the information required in the Guide to Content is sufficient for the petrochemical companies to complete an application? Explain.

1/5 ❑ YES **(PROCEED TO QUESTION 4)** **1/5** ❑ NO **(PROCEED TO QUESTION 3C)**

1/5 ❑ NO ANSWER **1/5** ❑ DON'T KNOW **1/5** ❑ ANSWER

---

c) What other required information, if any, would you like to see provided? Explain.

2/5 ❑ ANSWER **2/5** ❑ NO ANSWER **1/5** ❑ DON'T KNOW

---

4. **Your organization receives(d) information from the petrochemical companies and the Alberta Energy and Utilities Board to inform you of an application for a new or modification of an existing Industrial Development Permit.**

a) Has your organization found that, in general, the degree of information in a permit application is proportionate to the size of the project?

2/5 ❑ YES **1/5** ❑ NO **1/5** ❑ NO ANSWER **1/5** ❑ DON'T KNOW

b) Is the degree of information required sufficient in each type of application listed below?

PLEASE INDICATE WITH A MARK IF YOUR RESPONSE IS EITHER YES, NO, OR DON'T KNOW. IF YOU HAVE ANY FURTHER COMMENTS PLEASE WRITE THEM IN THE SPACE PROVIDED

YES	NO	DON'T KNOW	
2/5❑	**2/5**❑	❑	Original Application
2/5❑	**2/5**❑	❑	Major Amendment (i.e. facility expansion,debottlenecking)
4/5❑	❑	❑	Minor Amendment (i.e. debottlenecking a facility; increasing facility efficiency)
3/5❑	❑	**1/5** ❑	Name Change to facility (i.e. change in ownership)
❑	**1/5**❑	❑	Other: _____

1/5 ❑ NO ANSWER

c) To your knowledge, does the level of information requested in the application reflect the complexity of the project? Explain.
3/5 ❑ YES ❑ NO ❑ NO ANSWER 2/5 ❑ DON'T KNOW

---

5. **One of the final steps prior to the granting of an Industrial Development Permit is the issuing of an Order in Council. The request for an Order in Council is submitted to the Cabinet by the Minister of Economic Development and Tourism upon recommendation from his staff. An Order in Council is a document which if issued authorizes the Alberta Energy and Utilities Board to grant the Industrial Development Permit for the use of the hydrocarbon resources.**

Currently, all Industrial Development Permits require an Order in Council. However, there has been some discussion about the necessity of this authorization for all permit types. For example, the major applications and amendments would require an Order in Council while the minor amendments would not.

a) In your opinion, should the issuing of all Industrial Development Permits require authorization by an Order in Council? Explain.
4/5 ❑ ANSWER ❑ NO ANSWER 1/5 ❑ DON'T KNOW

---

b) Which permits should or should not be authorized by an Order in Council?
PLEASE MARK APPLICABLE BOX(ES).

YES	NO	DON'T KNOW	
3/5❑	2/5❑	❑	Original Application
3/5❑	2/5❑	❑	Major Amendment (i.e. facility expansion, debottlenecking)
2/5❑	2/5❑	1/5❑	Minor Amendment (i.e. debottlenecking a facility; increasing facility efficiency)
1/5❑	3/5❑	1/5❑	Name Change to facility (i.e. change in ownership)
❑	❑	❑	Other_____

6. **RE: THRESHOLD LEVELS OF INDUSTRIAL DEVELOPMENT PERMITS**

In addition to the types of projects that are subject to the Industrial Development Permits, there has been some discussion as to whether the threshold levels, as specified in the Oil and Gas Conservation Act, are placed at the proper level.
The Act currently states that:

- **⇨ the quantity of hydrocarbon energy resources used in a year as a raw material or fuel or both can not exceed 1 petajoule (10^{15} joules),**
- **⇨ the quantity of energy in the energy resource used as a raw material can not exceed 100 terajoules (10^{12} joules).**

It has been suggested that the new threshold should be higher or lower than the current level or should be triggered by an external regulation, such as Environmental Protection's EIA.

Of these suggestions made above, or any others, what do you think would be an effective method of applying the Industrial Development Permit to the regulation of hydrocarbon use in Alberta? Explain.
1/5 ❑ ANSWER **1/5** ❑ NO ANSWER **3/5** ❑ DON'T KNOW

---

7. **Currently, the Alberta Energy and Utilities Board provides companies with an Industrial Development Permit Guide to Content to assist in application completion. However, a comprehensive database does not exist. One possible solution could be the use of a computerized database which contains a record of all the necessary permits a petrochemical company requires to construct and maintain a facility and an estimate of length of time to completion for different types of permits.**

a) Would it be beneficial to your organization to have such a database?
2/5❑ YES **(PROCEED TO QUESTION 7B)** **1/5** ❑ NO **(PROCEED TO QUESTION 7C)**
❑ NO ANSWER **2/5** ❑ DON'T KNOW

b) What should be included in the database?
2/5 ❑ ANSWER **2/5**❑ NO ANSWER **1/5** ❑ DON'T KNOW

---

c) Would this database be a useful mechanism for your organization to gather information about the petrochemical company's Industrial Development Permit applications? Explain.

1/5 ❑ YES **2/5** ❑ NO ❑ NO ANSWER **2/5** ❑ DON'T KNOW

---

8. **In Alberta, in order to construct or expand operations, various permit applications are required, such as Industrial Development Permits and municipal permits.**

a) Has your organizations activities led you to examine more than one permit application?

5/5 ❑ YES ❑ NO ❑ NO ANSWER ❑ DON'T KNOW

b) Have you found there to be overlaps in the information requirements of the Industrial Development Permit with other permits?

3/5 ❑ YES **(PROCEED TO QUESTION 8C)** **2/5**❑ NO **(PROCEED TO QUESTION 9)**

❑ NO ANSWER ❑ DON'T KNOW

c) Has your organization's gathering of information been affected by the overlaps?

2/5❑ YES **(PROCEED TO QUESTION 8D)** **1/5** ❑NO **(PROCEED TO QUESTION 9)**

1/5 ❑ NO ANSWER **1/5** ❑ DON'T KNOW

d) What did you note the overlaps to be?

1/5 ❑ ANSWER **3/5** ❑ NO ANSWER **1/5** ❑ DON'T KNOW

---

e) What should be done about the overlaps?

2/5 ❑ ANSWER **2/5** ❑ NO ANSWER **1/5** ❑ DON'T KNOW

---

9. **Currently, as your organization may be aware, the Environmental Impact Assessments, now regulated under the Alberta Protection and Enhancement, and the Industrial Development Permit both require environmental information. The Environmental Impact Assessments exclusively deal with the impacts of a facility on the entire environment. While the Industrial Development Permit requires environmental information, the information provided is only one component of the permit.**

a) In your opinion, is the environmental information in the Environmental Impact Assessment and Industrial Development Permit dealt with efficiently? Explain.

2/5 ❑ YES **3/5** ❑ NO ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

b) In your opinion, to what extent should the environmental issues be dealt with in the Industrial Development Permit process?

5/5 ❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

Section C. **Process Relevance**

The purpose of this section is to obtain your organization's opinion about the relevance of the current method used in the Industrial Development Permit process and possible future changes.

1. **The Industrial Development Permits, as required under the Oil and Gas Conservation Act in 1974, are to be granted only if, in the public's best interest, the hydrocarbons are used efficiently without waste and ensure the present and future availability of hydrocarbons in Alberta. This future availability was defined as maintaining a 30 year hydrocarbon reserve. Due to the current perception that there is no shortage of resources, some individuals think that the legislation needs to be altered to reflect a change in perspective about resource availability, while others do not.**

a) In this context, what do you think should be the function of the Industrial Development Permit when dealing with the future supply of nonrenewable hydrocarbon resources?

4/5 ❑ ANSWER ❑ NO ANSWER 1/5 ❑ DON'T KNOW

---

b) Do you think the Oil and Gas Conservation Act, as stated above, is still relevant given that there are changes in perspectives on resource availability?

3/5 ❑ YES **(PROCEED TO QUESTION 2)** 1/5 ❑ NO **(PROCEED TO QUESTION 1C)**

❑ NO ANSWER 1/5 ❑ DON'T KNOW

---

c) How should the Oil and Gas Conservation Act be changed?

---

2. **Currently the issuing of the Industrial Development Permit, under the Oil and Gas Conservation Act, outlines the possible actions of the Alberta Energy and Utilities Board. It is being considered that changes of some of the functions of the Board, with respect to the Industrial Development Permit process, should be made. The changes would be modeled after those in the Oil Sands Act. The Oil Sands Act currently contains a clause which allows the board to prescribe appropriate conditions to the permit. An example of the conditions is a statement which allows petrochemical companies to have greater flexibility in the conditions applied to the permit when it is issued.**

Should the Oil and Gas Conservation Act be changed to allow the Alberta Energy and Utilities Board to focus on the current needs of the petrochemical industry when ascribing conditions to the Industrial Development Permit? Explain.

1/5 ❑ YES 2/5 ❑ NO ❑ NO ANSWER 2/5 ❑ DON'T KNOW

Section D. **Public Review**

The purpose of this section is to obtain your organization's opinion on public participation within the Industrial Development Permit process.

1. **a) What is the value of public participation within the Industrial Development Permit process?**
5/5 ❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

b) What is public participation designed to achieve?
4/5 ❑ ANSWER ❑ NO ANSWER **1/5** ❑ DON'T KNOW

_____

_____

2. **a) How many public participation activities has your organization been involved with over the last 10 years?**
PLEASE MARK THE APPROPRIATE BOX

1/5 ❑ 0- 5	**1/5** ❑16-20
1/5 ❑ 6-10	❑21-25
1/5 ❑11-15	**1/5** ❑ +26 (Please specify amount) **+40**

❑ NO ANSWER ❑ DON'T KNOW

b) How many of these were related to Industrial Development Permits?
PLEASE MARK THE APPROPRIATE BOX

3/5❑ 0- 5	**1/5** ❑16-20
❑ 6-10	❑21-25
1/5❑11-15	❑ +26 (Please specify amount)_____

❑ NO ANSWER ❑ DON'T KNOW

3. **When dealing with petrochemical companies and the Industrial Development Permit process, in particular, which types of issues have you found to be most commonly brought up?**

PLEASE MARK APPLICABLE BOX(ES):

3/5 ❑ Noise
5/5 ❑ Air Pollution
5/5 ❑ Smell
2/5 ❑ Visual Disturbance
1/5 ❑ Employment
4/5 ❑ Water Quality
3/5 ❑ Other: _____

❑ NO ANSWER ❑ DON'T KNOW

4. **a) Has the interest in environmental issues, in society as a whole, affected the manner in which your organization deals with issues surrounding development or expansion of petrochemical facilities, as pertaining to the Industrial Development Permit applications? Explain.**

PLEASE INDICATE IF THE ISSUES ARE NOT RELATED TO AN INDUSTRIAL DEVELOPMENT PERMIT

3/5 ❑ YES **(PROCEED TO QUESTION 4B)** **1/5** ❑ NO **(PROCEED TO QUESTION 5)**

❑ NO ANSWER **1/5** ❑ DON'T KNOW

_____

_____

b) How has it been affected?

_____

_____

5. **It is currently required that a public participation process be associated with new projects. In addition to this participation, it is required that any amendments made to the Industrial Development Permit must allow for the admission of objections and/or interventions. Some people hold the view that the public participation process should continue to play a part in all permits, while others believe that only major amendments and initial applications should be subject to a formal public participation process.**

What is your opinion on this issue?

4/5 ❑ ANSWER ❑ NO ANSWER **1/5** ❑ DON'T KNOW

_____

_____

6. **One of the aims of petrochemical companies, who have applied for or are obtaining Industrial Development Permits, is to share information with the public and listen to the public's comments about the facility, its operation and its plans. In this manner, the companies have attempted to build an accountability with the public.**

Based on your organization's experience, what is your perception of the effect a petrochemical company's accountability has on the acceptance of a facility in the surrounding community?

PLEASE SPECIFY IF PERMIT DISCUSSED IS NOT AN INDUSTRIAL DEVELOPMENT PERMIT

5/5 ❑ ANSWER ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

7. **What is your understanding of who can present an intervention or objection?**
PLEASE MARK APPLICABLE BOX(ES)

1/5 ❑ All Individuals Within in the Province
1/5 ❑ Interested Parties Out of Province
❑ Interested Parties Out of Country (i.e. United States)
3/5 ❑ Individuals Immediately Surrounding the Plant
2/5 ❑ Individuals in the Surrounding Region (+20 km away)
1/5 ❑ Individuals Living in Cities and Other Municipalities
2/5 ❑ Other (please specify):_____

1/5 ❑ NO ANSWER ❑ DON'T KNOW

8. **In your opinion, who should be allowed to present an intervention or objection?**
PLEASE MARK APPLICABLE BOX(ES)

1/5 ❑ All Individuals Within in the Province
1/5 ❑ Interested Parties Out of Province
1/5 ❑ Interested Parties Out of Country (i.e. United States)
2/5 ❑ Individuals Immediately Surrounding the Plant
1/5 ❑ Individuals in the Surrounding Region (+20 km away)
❑ Individuals Living in Cities and Other Municipalities
2/5 ❑ Other (please specify):_____

❑ NO ANSWER ❑ DON'T KNOW

9. **From your organization's perspective, what is the purpose of a company being an intervener for or against a petrochemical company who is requesting an Industrial Development Permit for the construction or expansion of a facility?**
PLEASE MARK APPLICABLE BOX(ES)

3/5 ❑ Product competition
1/5 ❑ Encroaching on the Market
2/5 ❑ Competition for Raw Material
1/5 ❑ Environmental Effects
2/5 ❑ Proximity of Facility
1/5 ❑ Employment
❑ Other (please specify)_____

❑ NO ANSWER ❑ DON'T KNOW

10. **a) Have you noted a change in the degree of public interest with the actions of petrochemical companies, who have applied to Industrial Development Permits, at present (1995) relative to the past? Explain.**
3/5 ❑YES ❑ NO ❑ NO ANSWER 2/5 ❑ DON'T KNOW

_____

_____

b) Have you noted a change in the degree of opinions being voiced, with respect to issues arising from petrochemical company development, at present (1995) relative to the past? Explain.
3/5 ❑YES ❑ NO ❑ NO ANSWER 2/5 ❑ DON'T KNOW

_____

_____

11. **a) What method or methods does your organization utilize for conflict resolution when dealing with Industrial Development Permits?**
PLEASE MARK APPLICABLE BOX(ES)

3/5 ❑ Mediation
1/5 ❑ Formal Negotiation
2/5 ❑ Letters
4/5 ❑ Personal Phone Calls
1/5 ❑ Media
2/5 ❑ Other (please specify):_____

❑ NO ANSWER ❑ DON'T KNOW

b) To what extent is/are these method(s) used?
PLEASE SPECIFY THE ABOVE METHOD(S) USED IN WHAT YOU ARE DESCRIBING
3/5 ❑ ANSWER **1/5** ❑ NO ANSWER **1/5** ❑ DON'T KNOW

_____

_____

c) To what extent does your organization employ lawyers and other legal services in the gathering of information, for Industrial Development Permit filing of objections and hearings?

IF YOU ARE REFERRING TO A PERMIT THAT IS NOT AN INDUSTRIAL DEVELOPMENT PERMIT, PLEASE STATE THE TYPE OF PERMIT
4/5 ❑ ANSWER **1/5** ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

d) At which stages of the public participation process do you employ these services?
2/5 ❑ ANSWER **3/5** ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

13. **a) Companies have been known to use the following list of methods to inform and maintain contact with the public. Which of these methods have you experienced?**
PLEASE MARK AS MANY BOXES AS APPLY TO YOU AND SPECIFY IF YOU ARE DISCUSSING CONTACT DURING TIMES OF GENERAL OPERATIONS OR DURING INDUSTRIAL DEVELOPMENT PERMIT APPLICATIONS

General	**During New Applications**	**During Amendments**	
3/5 ❑	**2/5**❑	**1/5**❑	Newspaper Advertisements
3/5❑	**1/5**❑	**2/5**❑	Newsletters
4/5❑	**3/5**❑	**3/5**❑	Open Houses
3/5❑	**1/5**❑	**1/5**❑	Plant Tours
4/5❑	**4/5**❑	**3/5**❑	Meetings with Community
1/5❑	**2/5**❑	**1/5**❑	Concern Phone lines
3/5❑	**3/5**❑	**1/5**❑	Community Advisory Groups
❑	❑	❑	Other _____

b) Does the company your organization approaches provide you with sufficient information about what is being done to deal with the concerns you raise in:

i) objections?

3/5 ❑YES **2/5** ❑ NO ❑ NO ANSWER ❑ DON'T KNOW

and ii) interventions?

2/5 ❑YES **2/5** ❑ NO **1/5** ❑ NO ANSWER ❑ DON'T KNOW

IF YOU ANSWERED YES TO BOTH OR EITHER i or ii PROCEED TO QUESTION 13C; IF YOU RESPONDED NO, PROCEED TO QUESTION 14

c) Do you consider the information to be sufficient? Explain.

1/5 ❑ YES **1/5** ❑ NO **2/5** ❑ NO ANSWER **1/5** ❑ DON'T KNOW

_____

_____

d) Is the information made available to your organization about the petrochemical company's progress with relevant Industrial Development Permits presented in an understandable fashion?

2/5 ❑ YES ❑ NO **1/5** ❑ NO ANSWER **2/5** ❑ DON'T KNOW

_____

_____

14. **Are the petrochemical companies receptive to continued communication from you as to your perceptions of progress with the Industrial Development Permit application?**

4/5 ❑ YES **1/5** ❑ NO ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

Section E. **Fees for Permit Participation**

The purpose of this section is to obtain your opinion on and amounts of costs incurred during the Industrial Development Permit process.

AS THE INDUSTRIAL DEVELOPMENT PERMIT AND THE ENVIRONMENTAL IMPACT ASSESSMENT HEARINGS ARE HELD JOINTLY, IT IS UNDERSTANDABLE THAT THE COSTS OF THE SERVICES ARE ALSO SHARED. HOWEVER, IN THE INTEREST OF THIS STUDY, PLEASE SEPARATE, AS MUCH AS POSSIBLE, THE COSTS OF THESE TWO PERMITTING PROCESSES.

1. **a)From your organization's point of view, what is your total cost of information collection and public hearing for one permit associated with the Industrial Development Permit?**

   IF THE HEARING WAS NOT AN INDUSTRIAL DEVELOPMENT PERMIT HEARING, PLEASE SPECIFY THE PURPOSE OF THE HEARING. ALSO, IF EXACT FIGURES ARE NOT AVAILABLE, PLEASE ESTIMATE THE COST TO THE NEAREST $1000

   $ _____

   1/5 ❑ NO ANSWER ❑ DON'T KNOW

   b) Please break down your total costs into the categories listed below. PROVIDE DOLLAR ESTIMATES IF POSSIBLE

Contracted Work	$_____
Cost of Hearings	$_____
Cost of In-house labor	$_____
Public Relations Costs	$_____
Invited Speakers	$_____
Lawyers	$_____
Transportation **(and per diem)**	$_____
Other: **Expert witness**	$_____

2. **a) In examining the Industrial Development Permit hearing costs, is there any duplication of costs with other hearings, for example the EIA?**

   2/5❑ YES **(PROCEED TO QUESTION 2B)** 1/5 ❑ NO **(PROCEED TO QUESTION 3)**

   2/5 ❑ NO ANSWER ❑ DON'T KNOW

b) Please list the duplications noted.
2/5 ❑ ANSWER **3/5** ❑ NO ANSWER ❑ DON'T KNOW

---

3. **a) Would reducing the overlaps in hearings and public consultation allow for a reduction in the total cost of an Industrial Development Permit hearing?**
❑ YES **(PROCEED TO QUESTION 3B)** **2/5**❑ NO **(PROCEED TO QUESTION 4)**
2/5 ❑ NO ANSWER **1/5**❑ DON'T KNOW

---

b) Which reductions would be useful?
2/5 ❑ ANSWER **3/5** ❑ NO ANSWER ❑ DON'T KNOW

---

4. **a) Is your organization aware of intervener funding?**
5/5❑ YES **(PROCEED TO QUESTION 4B)** ❑ NO **(PROCEED TO NEXT SECTION)**
❑ NO ANSWER ❑ DON'T KNOW

b) Have you used this type of funding?
PLEASE SPECIFY IF THE FUNDING HAS BEEN USED FOR OTHER PROCESSES OTHER THAN THE INDUSTRIAL DEVELOPMENT PERMIT
3/5 ❑ YES **(PROCEED TO QUESTION 4C)** **1/5** ❑ NO **(PROCEED TO NEXT SECTION)**
1/5 ❑ NO ANSWER ❑ DON'T KNOW

c) How much support has been provided to your organization during the Industrial Development Permit process?
IF POSSIBLE, PROVIDE DOLLAR ESTIMATES

$ _____

3/5 ❑ NO ANSWER

d) What other sources of funding have you had access to?
2/5 ❑ ANSWER 3/5 ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

Section F. Timeframes

The purpose of this section is to determine your organization's opinion of and the actual time required to complete the Industrial Development Permit process.

1. **If your organization kept a record of the length of time invested in the main steps of the Industrial Development Permit process, could you please state the length of time the steps took to complete? Please state time in weeks.**

IF POSSIBLE PLEASE REFER TO THE MOST RECENT PERMIT OR AMENDMENT UNDERTAKEN BY A PETROCHEMICAL COMPANY OR, IF IT IS NOT THE MOST RECENT PERMIT, SPECIFY WHETHER PERMIT TO BE DISCUSSED IS AN ORIGINAL OR AN AMENDMENT. ALSO, SPECIFY THE PETROCHEMICAL COMPANY YOU ARE DISCUSSING.

IF YOU HAVE NOT BEEN INVOLVED IN A INDUSTRIAL DEVELOPMENT PERMIT HEARING PLEASE OMIT THIS QUESTION.

a) COMPANY NAME:
PERMIT NAME_____ **PERMIT TYPE**_____

1/5 ❑ NO ANSWER ❑ DON'T KNOW

b) ACTIVITY	**TIME TAKEN**
Total Time for Public Participation Process	_____
Notice of Hearing	_____
Last Day for Objections	_____
Length of Time for Hearing	_____
Hearing Report Issued	_____
Other	_____

2. **a) Are there forces beyond the control of your organization, such as weather or Cabinet recess, which influence the length of time to completion of the Industrial Development Permit public participation process (i.e. hearing)?**
3/5 ❑ YES **(PROCEED TO QUESTION 2B)** **1/5** ❑ NO **(PROCEED TO QUESTION 3)**
❑ NO ANSWER **1/5** ❑ DON'T KNOW

b) What have you noted the external forces to be?
3/5 ❑ ANSWER **2/5** ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

3. **a) Do you consider the length of time for the completion of hearings and the settling of issues to be reasonable? Explain.**

REASONABLE TIME, IN THIS INSTANCE, IS DEFINED AS THE TIME REQUIRED TO COMPLETE ALL NECESSARY STEPS WITHOUT DELAYING THE HEARING.

3/5 ❑ YES **(PROCEED TO QUESTION 3B)** **1/5** ❑ NO **(PROCEED TO QUESTION 3C)**
❑ NO ANSWER **1/5** ❑ DON'T KNOW

_____

_____

b) How much time, in weeks, did your involvement in the process take?

_____ **weeks**

1/5 ❑ NO ANSWER **1/5** ❑ DON'T KNOW

(PROCEED TO QUESTION 3D)

c) What would your organization see as an appropriate length of time, in weeks, for your involvement in the process?

_____ **weeks**

1/5 ❑ ANSWER **1/5** ❑ NO ANSWER **1/5** ❑ DON'T KNOW

(PROCEED TO 3D)

d) If you organization views the time required to complete public consultation, as required in the Industrial Development Permit process, as being too long, what would you suggest be done to shorten the time to completion?

2/5 ❑ ANSWER **1/5** ❑ NO ANSWER **2/5** ❑ DON'T KNOW

_____

_____

e) Is the timeframe you suggest realistic when taking into consideration that all steps of the Industrial Development Permit process can only proceed if the previous step in the process has been completed? Explain.

1/5 ❑ YES ❑ NO **3/5** ❑ NO ANSWER **1/5** ❑ DON'T KNOW

_____

_____

4. **In your opinion, has the public participation process changed the amount of time required by a petrochemical company to complete an Industrial Development Permit application? Explain.**

5/5 ❑ YES ❑ NO ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

5. **In 1991 the Energy Resource Conservation Board undertook a study to see how the Industrial Development Permit process could be improved. One of the proposals in the study suggested that both a short and a long permit process exist. The short process would be used for administrative and minor changes because it bypasses unnecessary steps for smaller amendments. The currently used long process would be maintained for major changes and new applications.**

a) In your opinion, would the time to permit completion and the process, in general, be more efficient if the short and long processes were adopted? Explain.

2/5 ❑ YES ❑ NO ❑ NO ANSWER **3/5** ❑ DON'T KNOW

_____

_____

b)Do you have any other suggestions?

5/5 ❑ NO ANSWER ❑ DON'T KNOW

_____

_____

THANK YOU FOR YOUR TIME AND COOPERATION WITH THIS QUESTIONNAIRE

YOUR INPUT IS VERY VALUABLE TO THE EVALUATION OF THE INDUSTRIAL DEVELOPMENT PERMIT PROCESS

A COPY OF THE FULL RESPONSES TO THE INTEREST GROUP QUESTIONNAIRES ARE AVAILABLE FOR PERUSAL AT THE NATURAL RESOURCES INSTITUTE, UNIVERSITY OF MANITOBA.