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Impact Management and Social Performance in the Petrochemical Industry in Taranaki

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ABSTRACT

This thesis addresses the practices of the petrochemical industry, in particular exploration and production companies (E& P), in interacting with operations-affected community stakeholders. It does so by reviewing the range of methodologies common to the industry, and by surveying companies active in the Taranaki region of New Zealand. It seeks to answer the question: how can exploration companies minimise their social impacts and conflict with operations-affected communities, and the associated costs, in a mutually acceptable and sustainable way?

The thesis challenges the practice of addressing community concerns with, what the author has identified as, a public relations approach, the primary and underlying purpose of which is, it is argued, to further the economic interests of business. It maintains that practices arising from a public relations approach are both socially inappropriate and commercially ineffective when applied to communities who are negatively affected by companies with which they are obliged to share the same social and physical environment.

Instead the thesis supports a community development approach to interactions between the petrochemical industry and community stakeholders. This approach emanates from a philosophical framework that espouses human rights and the integration of social, environmental and economic development as an enduring function of commercial enterprise. It is posited that effective management of the dynamics of opposing interests will not be achieved through companies deploying 'nice people' to negotiate with disaffected, disparate and disempowered groups, but through the use of qualified social practitioners and the community development tools of social assessment, participation and empowerment to create mutuality beneficial outcomes.

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LIST OF ABBREVIATIONS

AEE	Assessment of Environmental Effects
CAG	Community Advisory Group
CAP	Community Advisory Panel
CD	Community Development
CMA	Crown Minerals Act
CSR	Corporate Social Responsibility
EIA	Environmental Impact Assessment
E & P	Exploration and Production
FCE	Fletcher Challenge Energy
MOU	Memorandum of Understanding
MOC	Ministry of Commerce
NGO	Non-Government Organisation
NZAIA	New Zealand Association for Impact Assessment
PEANZ	Petroleum Exploration Association of New Zealand
PEP	Petroleum Exploration Permit
PR	Public Relations
RMA	Resource Management Act
SA	Social Assessment
SIA	Social Impact Assessment
STOS	Shell Todd Oil Services Ltd

PREFACE

From 1998 to 1999 I was engaged by oil and gas exploration and production (E & P) company Fletcher Challenge Energy as a communications advisor. The appointment was made at a time when community opposition to the development of the Pohokura well-site in North Taranaki (see Case Study 4 in Chapter 5) involved the company in protracted debate and mitigation culminating in an Environment Court hearing and eventual settlement with submitters and appellants. While appeals to the court were essentially material in nature, the appellants – two hapu, environmentalists and a residents' collective – voiced private concerns that the communications and consultation process undertaken by the company were substantial in creating their opposition to the company's drilling plans.

Underpinning this inadequacy of process was, apparent to me, a belief held by some within the company of a right to proceed with work despite community concerns, and a reliance on practices that aimed at informing and negotiating with, rather than involving, communities. These company practices and others, I have identified and labelled as emanating from a public relations (PR) tradition. In assisting the company to address the inadequacies of this approach a community development (CD) position was encouraged. These two positions form the basis of the ensuing critique of the performance of the surveyed companies.

Working within the E & P industry provided opportunities to observe and to test some facets of a community development approach, and enabled access to staff and community members to discuss ideas, gain information and discern attitudes that aided in forming the positions and conclusions contained in this thesis. My views are also informed by a 17-year background in applied social science – community development and business management – and were received favourably by members of affected communities. Given my position within the company, the research is not strictly independent however it benefits from insights that would not be available to an independent researcher.

Chapter 1

INTRODUCTION

*Mind is the Master-power that moulds and makes
And Human is Mind, and evermore we take
The tool of thought and, shaping what we will,
Bring forth a thousand joys, a thousand ills: -
We think in secret, and it comes to pass:
Environment is but the looking glass.*
(James Allen: 1910)

Oil and gas exploration and production (E & P) companies worldwide engender emotional responses. For the governments, investors and other economically empowered parties in hydrocarbon-rich host countries the feeling is positive. These groups will benefit directly and in the main, handsomely.

For others – particularly well-site and indigenous communities who are hosts by default – the benefits are less profound, if there are any at all. They often experience or perceive these companies as powerful, uncaring, arrogant, and environmentally and socially irresponsible. The political and economic power of these companies is often resented and efforts to mollify and mitigate are viewed with distrust. These communities are often forced to accommodate oil rigs and production facilities in their neighbourhoods and on their land, along with the daily disruption and environmental and safety risks that accompany the petrochemical industry¹.

These multinational companies have significant resources that can be applied to improving the communities in which they locate. Capital clearly, but just as importantly, technical, environmental, and administrative knowledge and skills can be made available. The immense

¹ The terms 'petrochemical industry,' 'exploration and production companies' and 'the oil industry' are used generically to refer to oil and gas exploration and production companies, exploration-only companies and production or processing-only companies. 'Hydrocarbon mining' is used synonymously with 'oil and gas exploration'.

power they wield can be utilised to influence politics and culture in promoting human rights and environmental protection in developing countries where the political and legal infrastructure is not delivering. The process from adversarial and exploitative relationships to mutually beneficial relationships requires a fundamental rethink of the ethical responsibilities of E & P companies and the value of good social relationships, and the adoption of professional practice models.

The purpose of this thesis is to consider the relationships and critique the current practices of E & P companies, particularly with regard to ‘default’ host communities – landowners, residents and indigenous peoples – and propose a framework for effective and ethical practice. This will be done by:

1. Examining the social impacts of exploration and production activities on communities, and related social issues
2. Critiquing the effectiveness or otherwise of traditional and current public relations and consultation practices of petrochemical companies in managing social impacts generally, and specifically, by presenting case studies taken from companies in Taranaki
3. Proposing a community development approach to impact management that embraces social assessment as a planning and impact management tool, participatory and culturally relevant consultation practices, and social auditing.

Impacts are identified as macro – notably economic distortions which can improve economic well-being or enhance economic disparity – and micro, those impacts that directly affect those people sharing land with E & P operators. Micro impacts are primarily related to quality of life, health, land access and use, and raise issues related to landowner and indigenous rights to hydrocarbons. Secondary impacts at the micro level occur also because of the ineffectiveness of companies in managing community relations.

This research is timely and important in New Zealand as communities have become more articulate in protecting their lifestyles and land, and less willing to compromise these assets for the sake of industrial development. There is less acceptance of the ‘benefits’ of private development to the nation and of the exploitation of resources that are non-renewable and seen

as contributing to environmental degradation. There is a climate in New Zealand fostered in part by the Resource Management Act, which has allowed greater public involvement in environmental decisions, and the media in enhancing environmental awareness. This greater community power is a challenge to E & P companies who must account in a meaningful way for public views or face costly resistance to their operations.

1.1 Research Methodology

Much of the research is secondary, drawing from literature from throughout the E & P and other mining industries. Information is also drawn from anecdotal accounts taken from companies, social practitioners working with E & P companies, and from the development field and personal experience of the author as an employee of Fletcher Challenge Energy (FCE).

Primary research was undertaken with two E & P and one production-only company, which were surveyed in order to identify the approaches that are used in social intervention/community relations with operations-affected communities, and to ascertain to what extent they were consciously applied. Company respondents were selected on the basis that they were, or had been, responsible for undertaking public relations or community consultation at some time. Each respondent was briefed as to the purpose of the research and how the information was to be used. A guiding set of questions was used to explore the following areas:

1. The company's and the individual's degree of involvement with the public
2. Social assessment awareness and practice
3. How impacts/effects on the community are determined
4. What practice models or methodology are used in working with site affected communities in relation to consent-based consultation, iwi liaison, land access, PR/sponsorship, impact mitigation, community development and communications
5. How social performance is assessed
6. The issues – internal or external – that impact on the company's ability to deliver social programmes.

Representatives from three site-affected communities were interviewed to provide their views and experiences as recipients of the companies' community relations activities and approaches.

These are presented in case studies. These people were selected because of their depth of involvement with the companies and on their availability to be interviewed. References to community sentiment or case studies not attributed to individuals are taken from informal discussions. Case studies are used to illustrate the impacts of the divergent models of practice identified and are critiqued from a community development approach.

Anecdotal accounts of the author and from colleagues were gained through informal discussion, first person accounts and formal interviews, and are attributed as such. It should be noted that these accounts refer to practices covering a 20-year period. This is done to highlight the considerable changes that have taken place within the industry in terms of attitude and practice over time.

1.2 Overview

The substance of this thesis is organised in two parts. Chapters 2 and 3 are largely informative providing a context for the following analysis. Chapter 2 provides an introduction to the oil and gas E & P industry in New Zealand and describes the legislative framework within which it must operate. It describes the activities undertaken by operators, namely seismic surveying, drilling and the production and distribution infrastructure. Chapter 3 describes the typical social and environmental impacts and social issues that create the interface between companies and the communities in which they operate.

The second part addresses, in Chapter 4, the range of social methodologies that are used by the petrochemical industry in Taranaki (and many other companies elsewhere), which are predominantly public relations, consent-based consultation and land liaison. Case studies are used to illustrate the ways in which these companies have engaged with communities. In Chapter 5 these approaches are critiqued from a community development perspective. Chapter 6 continues a theoretical examination of community relations methodologies focusing on and expanding discussion of three core strategies, namely: social assessment, in which an argument for integration of social and environmental assessments is made; participation as a underlying theme of all social interventions; and iwi consultation as a distinct and specialised form of consultation.

Chapter 7 brings together much of the discussion in the previous chapters and proposes an integrated social development approach for E & P companies. Chapter 8 in conclusion supports a role for the industry in social policy.

Chapter 2

THE HYDROCARBON EXPLORATION & PRODUCTION INDUSTRY IN NEW ZEALAND

2.1 Introduction

This chapter provides an industry context and an overview of the legal and commercial framework for hydrocarbon E & P in New Zealand. By understanding the operating environment – the legal constraints on mining licence holders, the technical processes of exploration, the scale and range of operations and the risks and uncertainties that typify the E & P industry – insight is provided into the difficulties and issues incurred in managing socio-environmental impacts and community relations. It also identifies the legal juncture at which communities and companies interface namely in regards to the use of (typically) private land and mineral resources, and the implementation of the Resource Management Act.

2.2 History

Hydrocarbon exploration and production is based in and offshore Taranaki, the only region in New Zealand where the commercial harvesting of oil, gas and condensate takes place. Exploration has been undertaken in other parts of the country to a limited extent, namely in the West Coast of the South Island, Canterbury, Southland and Great South Basin, the North Island's East Coast, Far North and Whanganui.

Oil was first discovered on Ngamotu beach at New Plymouth's port in 1895. Hand-dug and beam-pumped wells produced oil for about 40 years until the field went into decline. The first modern, large-scale commercial production of oil and gas commenced in 1970 when the onshore

Kapuni Field in central Taranaki came on stream after it was discovered in 1959. It was developed by Shell BP & Todd in partnership with the government.

In 1979 the offshore Maui Field was brought into production and remains New Zealand's dominant source of gas supplying 80 percent of market requirements. The development of this field was effectively underwritten by the Crown, which entered into long-term 'take or pay' gas contracts with Maui Field partners. The Crown then used its gas entitlements to develop a Taranaki-based domestic petrochemical industry, gas fired power stations and, through the Natural Gas Corporation, a high pressure transmission pipeline system supplying industrial and domestic users.

A state owned enterprise, Petrocorp, established gas and oil production capabilities and infrastructure in Taranaki in the 1980s based on five fields, the most significant being McKee in Northeast Taranaki (refer Appendix 1 – Location Map). Fletcher Challenge Ltd bought Petrocorp in 1988 and, as FCE, remains one of the country's most dominant industry players.

2.3 Mining Permits and Royalties

Minerals in situ, including petroleum, are owned by the Crown as laid out in the New Zealand Crown Minerals Act. This Act is administered by the Ministry of Commerce (MOC), through the Minerals Programme for Petroleum, which establishes the policies, procedures and provisions to be applied in respect of Crown-owned petroleum.

To prospect for and harvest petroleum resources, three types of permits must be lodged with the MOC:

- a) Petroleum Prospecting Permits are granted for general investigative study or surveys to provide information for further exploration
- b) Petroleum Exploration Permits (PEP) are needed for undertaking work to identify deposits and evaluating the feasibility of mining discoveries; and
- c) Petroleum Mining Permits are sought for the development of petroleum fields

Petroleum Exploration Permits may be allocated as the result of an ‘Acceptable Frontier Offer’ or a ‘PEP Block Offer’ (refer Appendix 2 – Permitted Areas Map). The MOC sets up a bidding round identifying existing permitted blocks and inviting bids. These are allocated to the successful bidder with the decision to allocate based substantially on the submission of the best, staged work programme. Acceptable Frontier Offers can be made for any unpermitted areas in New Zealand allowing explorers to submit non-competitive bids over either onshore or offshore areas at any time, over any part of New Zealand (Gunderson B & Jones P: 1999, 12).

Returns to the Crown come in the way of royalties of a five percent ad valorem component or a 20 percent accounting profits component, of which the highest sum calculated is payable for each period. The royalty regime is based on the Minister’s interpretation of a fair financial return on its mineral estate (ibid: 13).²

Currently 27 exploration permits are held in Taranaki and 10 mining licences. (Refer Appendix 3 – Permit holders and operators).

2.4 Seismic Surveys

Under a prospecting permit, a company will undertake geological surveys over a broad area of frontier land. Exploration activity is focused on high prospectivity areas, that is, sedimentary basins containing thick accumulations of sediments, preferably with surface seeps of hydrocarbons or other direct evidence that a source rock is present and mature.

In the first instance satellite and aerial photographs and magnetic and gravity measurements may be used to locate and delineate the extent of the sedimentary basins. The outcropping geology may also be surveyed in an attempt to identify geological formations that are present deeper within the basin. Because these methods do not usually reveal much about the strata within the basin, nor where potential oil and gas traps might be located more detailed data is acquired through a process known as “shooting seismic”. In this process, explosives or vibrating weights

² Pros and cons of royalty are discussed in the MOC Minerals Programme for Petroleum: 1995

are used to send sound waves beneath the earth's surface. Equipment records the time taken for echoes to return to the surface. Variations in these echo times reveal clues about the orientation and nature of the rock strata below.

By the use of closely spaced series of 'shots' it is possible to build up a three-dimensional picture of the earth's structure and identify traps where oil and gas are likely to be. It is also possible to make inferences about where reservoir and seal rocks might occur and occasionally the presence of oil and gas can be identified directly from the seismic records. Seismic surveying takes place on the ocean surface using what is known as a 'gun and hydrophone array' trailed behind a specialised vessel (Crookbain:1998).

In 1997-98 a potential new gas field, Mangahewa, was identified in the PM Licence 38091 in North Taranaki. An extensive seismic acquisition programme was initiated covering a line grid area of 176 square kilometres over what was referred to as the western zipper of the Mangahewa 3D prospect. A total of 3730 shot holes were drilled and loaded along source lines laid at 720 metre intervals (Drillwell Exploration NZ Ltd: 1998, p2). The programme involved gaining access to hundreds of farms and other commercial properties over a three-month period. The data taken from the seismic survey was analysed and the information used to assist in identifying areas considered to be optimal drilling locations for gas discoveries.

2.5 Exploration Programme

Once a PEP is obtained, the company has five years, (with a possible extension of five years with a drop of 50 percent of the permit area if the area is over 6000 square kilometres) to conduct its exploration programme (MOC: 1996, 6). Exploratory wells usually, but not always, supervene seismic surveying and are drilled to determine whether the scientific inference that oil and gas might be present can be confirmed and to ascertain the potential for producing commercial quantities of hydrocarbons.

Identifying a suitable onshore surface site to install drilling equipment requires striking a balance between proximity to the geological target with considerations of the surface terrain and how the land is currently used. While an optimum subsurface location predicated the siting of a well, some

flexibility is possible with the capacity of drilling technology to drill horizontally and thus deviate the well path. This means the surface location of a well may be several kilometres over land from the subsurface location, and an onshore well may be drilled from offshore and vice versa.

Deviated wells are however more expensive to drill than vertical wells. Wells typically cost between \$6m and \$30m depending on whether it is onshore or offshore, the depth – which may be up to 4.5 kilometres – and the technical challenges posed.

Pre-drilling activity involves obtaining access to land from which to site a well by negotiating a lease with the landowner/s, acquiring the necessary resource consents from regulatory authorities, tendering out to secure an appropriate rig and operating and support services, and transporting the rig, buildings, equipment and paraphernalia required to the site to set up. The set-up takes several weeks and drilling may take between one and three months.

A typical New Zealand petroleum well is two to three kilometres deep though some are in excess of five kilometres (MOC: 1998, 15). To drill this far, large drill bits abrade the rock formations. Up to five may be used on a well, each costing up to \$25,000. As the drill penetrates deeply into the earth, drill pipe is added at the surface, each section being screwed to the next piece of pipe to create a drill string.

To cool and lubricate the bit and remove the rock ‘cuttings’ a high-density muddy suspension is constantly pumped down the centre of the drill string. The mud returns to the surface carrying the rock cuttings generated by the drilling process. The heavy weight of the mud counteracts the pressure that can be released when oil and gas deposits are penetrated. In addition, pressure control equipment is in place on all rigs to shut off the well should high-pressure gas be struck. These are crucial functions, as maintaining the correct pressure is critical to the safe extraction of oil and gas.

If oil and gas are found, geoscientists examine geological material from the well and the quantity of oil and gas flowing from it. From this they determine whether what they have found is consistent with what they expected and if there will be enough oil and gas to make it worthwhile developing the well fully and perhaps drilling others.

If the accumulation is believed to be sufficiently large for the company to make an economic return, appraisal wells are drilled before a final decision is made to proceed with developing the petroleum accumulation.

2.6 Mining Permits to Produce

At the completion of an exploratory well, decisions will be made as to whether the well will be abandoned, re-entered for further testing, or put into production. Hydrocarbon flows during testing are usually flared until it is known what quantities exist in the reservoir. Reserves, or the estimated size of a reservoir, are estimated by the flow pressure. At this point the well is sealed – either to be “abandoned” if flows are not considered economic or closed in temporarily until production facilities are constructed. A Petroleum Mining Permit is required before petroleum is commercially harvested. In order to obtain this permit the operator must develop a plan which will maximise the recovery of the resource whilst minimising environmental impacts and meeting safety and environmental standards. This plan is approved by the MOC before any construction or mining can take place.

Once oil and gas are flowing from the well the product must be separated into its component parts and transported to storage points before being transported to customers in a stable form with consistent specifications. Extracted hydrocarbons in Taranaki are piped to production stations for refining before either re-entering the pipeline system to customers or being road transported by tanker. Producing wells need to be tied into the closest production facility so pipelines are constructed to connect with the existing transmission system. This again involves obtaining land use resource consents and obtaining access to private land through which pipelines will be laid.

A number of different ways of “producing” the oil and gas are practised – depending on the nature of the field. On the Maui A platform off the coast of Taranaki, condensate (liquid hydrocarbons condensed from gas reservoirs) is separated from gas and water produced from the Maui gas field. The condensate and gas are separately piped 30 kilometres to the Oaonui

Production Station near Opunake. There the gas is cooled to allow liquefied petroleum gases to be separated and marketed as a separate hydrocarbon “stream”.

In contrast, at the McKee oil field in North Taranaki heated pipes, which prevent the waxy oil from solidifying, transport all the products from the wells to a production station. Here they are separated into oil, gas and water. The oil then begins a 40-kilometre journey to the Omata tank farm in New Plymouth. There it is stored and then loaded onto tankers for export to mainly Australia and Asia.

Produced gas is sold predominantly for use in gas-fired electricity generation at eight North Island stations (41% of gas produced in 1999) and for methanol at the Methanex plants in Motunui, North Taranaki (39%) (MOC: 2000, 20-22).

2.7 Resource Requirements

The level of involvement of a permit holder in its E & P activities varies markedly. In the McKee Field, New Zealand’s largest onshore oil field, Fletcher Challenge Energy has a 100% interest in the licence and operates the field. However in the Ngatoro Field it has a 60% investment and the operator is New Zealand Oil and Gas (NZOG). Licence holders can exercise an option to farm-out a percentage of their interest in a well as a way to balance investments, share risk or to repay debt.

Each phase of E & P activities involves specialised teams of individuals. The permit holders contract out much of the work. Contractors are involved in seismic drilling, seismic data analysis, and restoration. On a well-site, contractors are involved in rig construction, drilling, drilling fluids, well testing, data analysis and security.

The costs of exploration are very high, as are the risks. Only one in ten exploratory wells will be a discovery. It is an industry of uncertainty given that no one knows with surety what the stratigraphical subsurface composition is. In 1998 a decision to drill an onshore well in Motunui was rescinded after a substantial investment had been made in the preparation stages of the project. This was due to a new interpretation of seismic data, which indicated that the point of

drilling was in a saddle between two culminations and not at the apex of a culmination as had been previously thought.

The availability of a rig, of investment partners, and the go-ahead by directors and senior company executives are other critical factors that can alter project plans, a situation that is highly frustrating for operations-affected communities who want to know about fixed and final plans.

The industry has a potential for industrial accidents, injuries and environmental degradation, all of which have necessitated a strong focus on safety and environmental management.

Environmental performance is monitored internally and externally and high penalties for environmental accidents act as significant incentives for companies to act responsibly.

2.8 The Resource Management Act

The RMA 1991 is an environmental statute administered by the Ministry for the Environment. It is implemented principally by local authorities – regional and territorial authorities – which have wide ranging policy and regulatory powers under the Act. The RMA is aimed at ‘improving environmental outcomes through the promotion of the sustainable management of natural and physical resources’ (MFE: 1997, 1).

In New Zealand sustainable development is defined as:

... managing the use, development, and protection of natural and physical resources in a way, or at a rate which enables people and communities to provide for their social, economic and cultural well being and for their health and safety while:

- a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generation; and
 - b) Safeguarding the life-supporting capacity of air, water, social and ecosystems; and
 - c) Avoiding, remedying or mitigating any adverse effects of activities on the environment
- (Section 5, RMA: 1991).

The RMA places an obligation on companies to follow various environmental rules and practise good environmental management. Non compliance of provisions relating to the Act, that is, failing to meet resource consent conditions or causing environment effects through ignorance, negligence or deliberate actions, can lead to a range of penalties from an infringement notice and fine of up to \$1000 to the shut down of the operation, fining of managers and/or the company (maximum \$200,000) or up to two years imprisonment (Kingett Mitchell & Associates: 1998, 5).

A number of matters regarded as being of national importance are identified under the RMA including: preservation of the natural character of the coastal environment, protection of outstanding natural features and landscapes, and significant indigenous flora and fauna, maintenance of public access along the coast, lakes and rivers, and the relationship of Maori and their culture and traditions with their ancestral lands, waters sites, wahi tapu (sacred places), and other taonga (possessions) (Section 6, RMA: 1991).

The RMA has enhanced and empowered Maori iwi and hapu (tribal bodies) by acknowledging their role as tangata whenua (indigenous peoples) and as partners to the Treaty of Waitangi by expressly requiring that the principles of the Treaty of Waitangi be taken into account. In so doing it seeks to avoid future grievances emanating from breaches of the Treaty. In addition to Section 6 (e), which recognises the relationship of Maori to their taonga, Section 7 provides for other matters that decision-makers must have particular regard to including 'kaitiakitanga' (7a) and 'the ethic of stewardship' (7a). Kaitiakitanga is defined as 'the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Maori in relation to natural and physical resources, and includes the ethic of stewardship' (s2(1)). Section 8 of the Act provides that decision-makers under the RMA shall take into account the principles of the Treaty of Waitangi.

The 'principles of the Treaty of Waitangi' were introduced into New Zealand legislation in 1975 through the Treaty of Waitangi Act to overcome problems associated with considering the literal words of the Treaty Articles in isolation, and the variances in meaning in the translations. The principles relate to:

- The cession by Maori of sovereignty to the Crown exchanged for a guarantee of rangatiratanga

- Tribal self-regulation
- Partnership exercised with utmost good faith
- Active protection of Maori interests, primarily the continued authority to exercise rangatiratanga over natural and cultural resources

(Crengle: 1993, 10-16).

The Taranaki Regional Council, the New Plymouth District Council, the Stratford District Council and the South Taranaki District Council are, in Taranaki, the four local government agents responsible for enacting environmental policy at a local level. Their primary roles in this regard are to:

- Set environmental objectives, policies and standards that reflect government and community values
- Make decisions on applications for resource consents to use natural and physical resources
- Monitor environmental effects and enforce compliance with their plans and consent authorisations

(Kingett Mitchell and Associates: 1998, 9).

Resource consents are essentially a licence to carry out activities related to land use, the taking, damming, using or diversion of water, the discharge of contaminants onto or into land, water or air, subdivision, and use of the coastal marine area. The applicant must provide information of the likely effects of their proposed activity and identify potentially affected parties and describe any consultation undertaken with those parties. Where effects are minor and written approval is obtained from affected parties, the application for consent may be given a non-notified status. Certain types of activities set out in Sections 94(1b) and 94(1a) do not require notification if appropriate provisions have been included in regional or district plans. Otherwise the application will be 'notified' requiring it to be publicly advertised to allow public submissions of views. Opposing submissions if not resolved by the consent authority through a pre-hearing and formal hearing process may be lodged with the Environment Court (ibid, p10).

Resource consents may stipulate conditions on their provision. These may be monitored and if found to be in breach, remedial or punitive action will be undertaken (ibid, 10).

2.9 Industry Culture

The high costs, risks, and returns of the oil industry, the uncertainty, the complexity and the safety and environmental risks are factors that essentially form the culture of hydrocarbon E & P companies.

The industry is both highly competitive yet at the same time dependent on competitors to invest in joint ventures in order to share risk and augment operational resources. It is an industry that is dealing with a finite resource, estimates of the size of which fluctuate enormously due to politics, competition and increasingly sophisticated tools for finding new reserves. It is an industry that is made vulnerable by oil price fluctuations. The inability to protect against low oil prices leaves weak companies susceptible to take-over.

Hydrocarbon E & P is an industry made extremely powerful by the world's dependence on its product and the high value placed on it, and by scarcity issues associated with finite resources. Companies attract and employ highly educated and experienced scientists and engineers from around the world giving the industry an interesting multiculturalism and international bonhomie. These factors make it a unique and exciting industry to work in but a very difficult one for external stakeholders to comprehend.

2.10 Summary

The exploration and production of hydrocarbons in New Zealand has provided a significant national resource providing for 100% self-sufficiency in natural gas, 46% in oil, and export earnings for the past 30 years (MOC: 2000, 28). In this sense the industry has a high national value. It is perpetually facing changes – with each change impacting in some way in on the national economy and on customers, contractors and local communities – and enduring new pressures.

A decline in the Taranaki oil and gas fields has created economic uncertainty, however a strengthening oil price, stimulating renewed exploration efforts (and recent finds) within Taranaki and elsewhere in the country, has renewed hope for further work and revenue.

Crown interests in the industry have changed in the last 15 years. Through the privatisation of state owned energy companies, significantly Petrocorp and Synfuels, its role is now one of investor and manager of the legislative controls of the CMA. Benefits to the Crown are accrued by way of royalties paid by the companies.

The business of E & P and production companies has increasingly become more sophisticated and complex, impinging in a range of ways on the communities in which they operate, primarily through land access arrangements and environmental and social impacts incurred in the process of seismic surveying, drilling, pipeline construction and production processes.

The Crown through the Ministry of Commerce confers considerable rights to licence holders but also considerable pressure to meet timeframe obligations. Pressure on companies also comes in the form of maintaining work programmes planned to co-ordinate a number of contractor roles. There is pressure to meet company objectives including shareholder expectations, to meet social expectations to locate and produce hydrocarbon reserves, and to meet the supply needs of customers. A further compounding pressure is that exerted by communities opposing the activities of these companies. Communities, as will be shown in examples throughout this thesis have power, legally through the RMA and through collective action, to stall, subvert and otherwise undermine plans and operations leading to considerable financial costs to the company, contractors and the government and society. Social management strategies as proposed in this thesis are necessary to manage the community dynamics in such a way as to minimise opposition and related expense while simultaneously addressing, in an acceptable way, the interests and rights of community members.

THE SOCIAL & ENVIRONMENTAL IMPACTS OF HYDROCARBON MINING AND ASSOCIATED COMMUNITY ISSUES

3.1 Introduction

Oil and gas exploration and production companies operate worldwide to meet the global demand for oil-based products and the commercial expectations of their shareholders. Socio-economic and environmental impacts deriving from the activities of these companies are experienced at a national structural level, regionally and most immediately at the level of the communities who live and work in the areas shared by explorers.

While this thesis is primarily concerned with social impacts on operations-affected communities, an overview of some key macro effects is provided as these indirectly influence the issues generated in these communities. Macro effects are global, national or regional industry impacts while micro impacts are those felt directly by communities through E & P operations. The distinction between micro and macro effects is not always clear-cut given that the same activities may have an impact at both local and national levels. Literature illustrating these impacts is drawn from both international and New Zealand sources.

3.2 Macro Effects

The scale of impacts of E & P companies on their host nations depends on a number of factors including the extent of operations and their significance to a country's economy, the level of political stability and quality of governance, and the regulatory systems in place to control companies' behaviour. Table 1 summarises the major macro impacts discussed below.

Table 1: Summary of Macro Effects of the Petrochemical Industry

Positive Impacts	Negative Impacts
<ul style="list-style-type: none">• Improved balance of payments and hard-currency influx• Greater political and economic independence• Internal infrastructure improvements• Cheap energy• Employment opportunities• Social investment programmes	<ul style="list-style-type: none">• Social inequities from corruption and inequitable distribution of created wealth and lack of social policy planning• Structural problems and the 'Dutch Disease'• Infrastructure pressure for example, housing market distortions• Environmental damage• Indigenous/human rights violations regarding land use and ownership of hydrocarbons• Decline in property values• Vulnerability to price fluctuations

In Indonesia, Brunei, Nigeria, Venezuela and some other developing countries corruption and political instability often prevent the benefits of oil-generated wealth being shared with their citizens, despite high expectations and assurances that this will be the case. In Indonesia, kickbacks to oil officials for employing staff or returning favours reflect a measure of corruption in government, the relative power of oil companies and the susceptibility of key players to be corrupted. The government stipulates E & P companies must employ local staff however these token local staff are not trained, are placed in menial tasks and do not advance in the industry (Anecdotal accounts from former expatriated staff in Indonesia: 1999). In Burma local communities were excluded from the decision-making process regarding the development of the Yadana project. Those who voiced opposition to the ruling military junta were forced to flee the area to prevent reprisals. On the Thailand side of the border the government approved the project before an environmental impact assessment (EIA) was completed. The EIA was later concluded, by a National Commission set up to investigate the project, to be flawed and the Petroleum Authority of Thailand was found to have deliberately misled the public to ensure the project proceeded as scheduled (Udomitpong & Giannini: 1998).

The power of the oil dollar is such that it brought about the Third World debt crisis of the 1970s when huge profits were generated for members of the Oil Producing and Exporting Countries (OPEC). Their surplus funds were invested in First World commercial banks, which used much of it for financing development projects in developing countries. According to Mowforth &

Munt (1998: 291): 'In the rush for "development" many of the projects were ill-considered and poorly planned.' Much of the money ended up back in the banks from where it came as a result of engaging First World companies on projects. Later interest rates rose sharply and borrowing countries found they could not pay the interest let alone the loan principle. These banks turned to the World Bank and IMF who were to restructure Third World economies and this led to the rise of structural adjustment programmes.

In New Zealand, the development of infrastructure and production facilities to manufacture harvested oil and gas in Taranaki produced a five-year period of jobs in the region. The planning and integration of the development of the energy projects did not occur in a co-ordinated manner, according to Woudt (1997, 68):

The result was a large inflow of skilled and semiskilled workers who brought with them demands for housing and community services, as well as their retail spending propensity. Thus in the short space of three to four years from 1982 to 1985, North Taranaki experienced a housing crisis and some community upheaval as well as a retail and investment boom.

The positive impacts of oil sales for a country can also include cheap energy, greater independence, hard-currency influx, internal infrastructure improvements, and improved balance of payments (Kurbanov & Sanders: 1998, 2). However these benefits will come about only where responsible governments use the opportunities renewed income brings to revive failing economies and institute social policy measures. Oil producing countries where petrodollars have not been used constructively can create serious structural problems in the economy. According to Noreng (1998: in *ibid*, 3):

The main characteristic is a general loss of industrial competitiveness, with a potential for a gradual de-industrialisation of the countries concerned. The process is essentially due to two sets of factors; a general cost pressure in the economy caused by the domestic use of oil revenues; and a rising exchange rate, due to financial surpluses (that is, revenues that are not used domestically) as well as due to deliberate policy. Thus, whether oil revenues are

used in the domestic economy or are exports, they represent a problem for traditional industry when they reach a certain magnitude.

The term 'Dutch disease' was coined after the Dutch experience of a negative overall effect of energy exports on their economy. Cash-flows from oil development strengthen national currencies in relation to the US dollar causing imports – both oil and non-oil – to become cheaper while local products become comparatively more expensive. The result according to Kurbanov & Sanders (1998, 3) '... is that most branches of the national economy outside of oil exploration and its transportation quickly deteriorate – hence the Dutch disease'. Economic performance in Iran during an oil embargo imposed after the nationalisation of Anglo-Iranian Oil Company in 1951 was favourable and referred to as "the period of industrial recovery" (ibid, 3).

A national dependence or close link to the boom and bust cycle of the oil sector leaves economies (regional and national) susceptible to price fluctuations. Schaff (1999, 58) notes that it is not uncommon for developing countries to obtain project financing for national oil development. However: 'Because of the instability of the country's economy, credit is often reduced or withdrawn. If granted, credit typically is underwritten by proved reserves.' This creates acute funds flow problems '... as an increasingly larger portion of existing reserves is provided to collateralize debt.'

Issues of equity and rights to undeveloped hydrocarbons have arisen in relation to claims of inadequate compensation for loss of production from land, displacement of residents from their homes and indigenous claims to ownership of subsurface minerals including oil and gas. Indigenous groups' claims span oil field operations in the USA, Australia, Canada, Asia and New Zealand³. In New Zealand Ngati Kahungunu in 1998, Rongomaiwahine (1997) and Nga Hapu o Ruahine (1999) made claims to the Waitangi Tribunal calling for acknowledgement of oil and gas as taonga of Maori as acknowledged in Article 2 of the Treaty of Waitangi, which are subject to

³ Reports on indigenous claims can be found at www.innu.com (USA); www.ram.organisation/oilreport (Central Africa, SE Asia, Western Amazon, Siberia & Russian Far East); www.arcticcircle.uconn.edu/ArcticCircle (Soviet Union & Alaska). www.hartford-hwp.com (West Siberia). The Office of Treaty Settlements has reports on claims to the Waitangi Tribunal.

customary rights and to native title. The Petroleum Act and the Crown Minerals Act (CMA) preserve the Crown's exclusive ownership of all petroleum resources in NZ yet the Treaty of Waitangi guarantees Maori tribes in the Second Article '... the full exclusive and undisturbed possession of their Lands and Estates Forests Fisheries and other properties.' Christiansen et al (1998: 4-5) believe that mineral claims would be unlikely to be satisfied however, on the basis that '... there would only be grounds for a claim where the land is in Maori ownership or the iwi could successfully argue for mineral rights.' In the event of a finding by the Waitangi Tribunal in favour of iwi:

... it is possible that any recommendation ... would be of little effect. Maori have placed little value in petroleum in the past and the high risk, high cost nature of the industry means they would generally be unable to carry out exploration and exploitation of the resource without industry assistance.

However Tapsell (2000, 18) is less dismissive of the prospects for a successful Treaty claim to petroleum by Maori despite the nationalisation of the resource (under the Petroleum Act 1937). Claims could be based on the right to develop taonga, on compensation for the extinguishment of aboriginal title (as was done by nationalising the resource), or on failure by the Crown to protect Maori ownership of petroleum on the continental shelf, where reserves are not nationalised and a claim for title might be made.

Shell in Canada was motivated to develop a comprehensive aboriginal affairs programme after the federal government in 1995 released a policy paper stating that the inherent right to self-government is an aboriginal right under section 35 of the Constitution Act (1982) strengthening aboriginal positions of rights and land titles. Shell also regards relationship building with First Nation peoples as 'a pragmatic, business-as-usual decision' (Interchange, No.3: 1998, 7).

In Nigeria, where land is state owned, foreign oil companies need only the required permits from the government to begin drilling. As a result Nigerian farmers may find an oil company working in their field, as well as a notice that their land has been taken away. The amount of compensation for a lost harvest, lost fishing grounds or damage to property is determined by the

oil company and the amounts have been ridiculously low; for example \$16.20 was paid for a hectare of rice, far below the actual market value (Danler and Brunner:1996, in Kurbanov & Sanders, 1998: 19).

Nigeria since independence some 30 years ago has made billions of dollars in oil profits. Yet living standards for most have not improved.

Shell has extracted some \$30 billion worth of oil since 1958 ... even by Africa's harsh yardstick, the Ogoni remain desperately poor; most live in palm-roofed mud huts and dig for yams with bamboo sticks ... Of Shell's 5,000 employees in Nigeria only 85 are Ogoni. Although there are 96 wells, two refineries, a petrochemical complex and fertiliser plant in the area the sole hospital is an unfinished concrete husk, and the governmental schools, unable to pay teachers, are rarely open ... (Wall Street Journal: May 1994, 1).

In the Soviet Union indigenous reindeer herders are losing land to oil explorers despite requirements (post Perestroika) for companies to consult with indigenous communities. Khanty villagers in 1997 found roads to production platforms built through their marshes and lakes. Pipes installed to provide water exchange between the two halves of the lake were too small and, as a result '... the water inside froze, exchange of water stopped and fish died away from lack of oxygen' (INFOE: March 1997). Throughout the area:

... oil spills and casual pollution blacken the wetlands, raised roads trap water causing flooding and ruining the forests, fires caused by oil worker carelessness and petroleum-soaked debris send columns of smoke into the air and acid rain blights huge territories (Gordon:1998).

Offshore drilling in Russia's Far East threatens more than half of the world's remaining wild Pacific salmon and other fish on which native communities, including the Koryak and Itel'men people, depend. Also at risk are grey whale habitats and endangered stellar sea lions and a large diversity of seabirds (ibid).

Project Underground (1998) in monitoring global environmental effects from the E & P industry note that:

- fossil fuels have made a 60% contribution to climate change compared to 17% from deforestation
- there are 22 countries with frontier forests threatened by oil and gas exploration
- 38 countries with coral reefs and 46 with mangroves are threatened by oil and gas exploration
- there are six continents where indigenous peoples are threatened by oil and gas exploration
- since 1988 when nations first pledged to stop climate change by reducing emissions 4,040 new contracts for exploration had been awarded, 113,466 new wells have been drilled (of 507,414 in total) and 14.99 million km of seismic lines cut and a rise in global mean temperature since of 0.3-0.6C.

Agricultural land values can be significantly affected by oil and gas activities, according to Baen (1998, 1) who notes that earthworks and other potential environmental effects are important factors in investment decisions concerning the operation and long-term investment potential of agricultural lands. In New Zealand the key macro issues for land access relate to the notion of dual property rights, whereby farmers own the top of land and the Crown owns the subsurface and provides explorers with the right to mine. This has contributed to an uneasy alliance between landowners and exploration companies and generated debate on the vestment of mineral rights in land owners (Ackroyd: 1988, 41; Barton: 1989).

A positive impact of the oil industry is the use of “social investment” as a corporate citizenship contribution. This is a post-PR charitable response by companies aiming to provide a two-way benefit (for the community and the company) through investing in sustainable social, economic and environmental development programmes (Hollins: 1999, 12).

3.3 Micro Impacts

The following discussion defines affected communities, identifies the impacts they may experience and their concerns in relation to this. Table 2 summarises these micro impacts.

Further (Table 3, p35) impacts and concerns are identified as they manifest at various stages of exploration and production, thus enabling a planned approach to impact management.

3.3.1 Affected communities

Well-site or “operations affected” communities comprise residents – those who live near drilling sites or production stations; landowners – those who have made their land available to the company for the purposes of conducting E & P; those with an historic relationship with the land; and other recreational and commercial users who utilise land and amenities in the area.

Landowners are usually also residents but come into contact with E & P companies differently, through formal arrangements made to provide land for well-site and production station development, easements and access ways for utilities, pipelines and seismic surveying. Impacts on landowners are generally in relation to unsatisfactory lease arrangements or, as noted in the Nigerian example, formal arrangements with the State in deference to the landowner/occupier, compensation levels (in New Zealand these amounts are guided by a Land Access Code) and breaches of agreements, for example, failure to restore pasture post drilling. Generally landowners, because they receive compensation in a fairly straightforward business arrangement, are more accommodating of impacts such as noise, traffic and lighting than are other residents.

Indigenous groups may be either or both resident and landowner in relation to E & P companies. Sometimes they are neither. In New Zealand Maori iwi and hapu (tribal bodies) claim, and are afforded acknowledgement in law for, a role as kaitiaki over land they have historically held, alienated lands and native reserves. Impact issues for Maori are generally environmentally based, particularly concerning waterway contamination where fish and other food and vegetation are collected for consumption and cultural purposes. The Ministry of Environment recognises ‘the life supporting and productive capacity of mahinga kai (food reserves) is of special significance for many hapu and iwi’ (1999, 20). The preservation of wahi tapu such as pa, urupa (burial grounds), traditional pathways, significant rocks and land features, and the culturally appropriate means of dealing with archaeological finds, are key issues for Maori (Parliamentary Commission for the Environment: 1992, 32).

3.3.2 Typical impacts

The socio-environmental impacts of E & P operations are summarised in Table 2 and discussed below.

Table 2: Summary of Micro Impacts of Hydrocarbon Mining

Positive Impacts	Negative Impacts
<ul style="list-style-type: none">• Educational interest• Lighting• Short-term jobs for locals• Compensation payments• Community donations	<ul style="list-style-type: none">• Noise from traffic and operations• Lighting• Increased traffic• Oils spills into waterways threatening food sources• Pressure on local communities to respond to consultation requests and to monitor environmental impacts• Disruption to land-use activities• Disturbance to stock and wildlife• Disruption of historic and tapu sites• Smoke from flaring• Disturbance from ground tremors• Blowouts

Seismic acquisition, drilling and the laying of pipelines from wells to production facilities are the three most fundamental and visible operations of the upstream oil and gas industry. Each facet involves a set of impacts on well-site communities including and involving land access and compensation, protection of historical and cultural places, emissions to air, to land and into waterways, visual, health, safety, traffic and noise impacts, and incidental others. Issues of process – consultation, inclusion, compensation, mitigation, communications and profit sharing – generally accompany the above impacts as do macro issues of indigenous ownership of hydrocarbons, land displacement, downstream carbon emissions and the use of non-renewable fossil fuels.

The following case study illustrates how seismic surveying across the Mangahewa gas field affected local communities.

Case Study No. 1: Seismic Survey Mangahewa

In 1998, seismic surveying took place over sizeable tracts of North Taranaki by E & P company Fletcher Challenge Energy (Refer Appendix 4 – Mangahewa 3D Seismic Location Map). The surveys involved laying cable over hundreds of hectares, drilling holes into which explosives were placed and charged in order to create subsurface sound waves that, when deflected off the structural layers, indicate to geophysicists the presence of hydrocarbon-forming geological formations. Communities felt the impacts primarily from an increase in road traffic and noise from helicopters, which were in constant use to ferry the drilling equipment and cables to the position on the farmland. During the approximately three-month survey period residents raised concerns relating to the length of daylight hours worked, work continuing during statutory holidays, the potential effect of vibration from shot blasts (experienced as ground tremors) and the possibility of foundation damage to structures, and noise from explosions, helicopters and from the seismic recording truck. An ostrich farm owner complained about agitation produced in his stock from helicopters flying overhead. This continued despite assurances that the flight path would be deviated away from his property. Local hapu made claims that Fletcher Challenge Energy had made transgressions in terms of wahi tapu, in one case where seismic cable was laid across a marae atea, that is, the open land in front of the meeting house (Anecdotal accounts from community: 1999).

Drilling operations are more routinely undertaken than seismic surveying. These include new exploratory wells, re-entry and side-tracking of existing wells, and workovers (well maintenance involving the replacement of drilling pipes). Five offshore and up to 13 onshore wells are (known to be) proposed in Taranaki in 2000, by eight E & P companies adding to the approximately 100 wells in existence (The Daily News: July 2000, 19). Worldwide, thousands of onshore wells will be drilled, operating continuously over a two-week to three-month duration. Depending on the proximity to dwellings, residents might be affected by, or concerned about, effects from increased road traffic, noise from the generators, brakes and drill pipes, health impacts of smoke emissions from flaring, danger from blow-outs, environmental impacts on water table levels and discharges into streams.

Visual impacts are experienced negatively by some. Drilling rigs are up to 50 metres high and the site covers about a two-hectare area. At night the rigs are lit for safety and security. Lighting consists of 200-watt inward pointing fluorescent lights on the derrick, 500-watt spotlights pointing at the drill floor, and aircraft warning strobe lights on the top of the derrick. Light from flaring can be conspicuous during overcast evenings when the light will reflect back off the clouds. Lighting can also be experienced positively – a farmer reported that the rig lights contributed to an increase in milk production.

Rigs can be noisy, emitting sounds ranging from the low-level continuous drone of engines, to short intermittent sounds from explosive charges, pumps, or pipes clattering on the rig floor. In 1998 neighbours to the Fletcher Challenge Energy Ohanga-2 well-site north of Waitara reported noise to be disruptive at night-time. Climate and topography affect noise propagation, that is, the way in which sound is spread, absorbed, refracted, scattered and interacts with surfaces (Bass: 1992) making it typically difficult to predict.

Produced water (from the well) is disposed of by being reinjected underground. Treated stormwater is discharged to the nearest water course as specified under the conditions of the resource consent. While this is filtered before discharge, the potential for chemical or oil spills to reach waterways exists. The stormwater treatment system serves two purposes, one to treat the

stormwater to a standard required by the consent and two to provide containment on the lease in the unlikely event of a spill (Interview: Craig Evans, Environmental Adviser, FCE, 2000).

Low toxicity drilling fluids comprising various polymers and synthetic muds pumped down the well as part of the drilling process are generally disposed of by deep well injection. The impact of water discharge is felt notably by hapu concerned about erosion to wahi tapu and degradation of food sources in waterways. Although erosion is not an actual physical impact, the fears of such an event occurring are actual. Farmers tend to raise issues mainly about noise and traffic.

Flaring of gas and heavier hydrocarbons is likely to take place intermittently for between 30 and 180 days during well production tests and clean-up. Residual drilling fluids, formation water and oil left after a well has been completed are usually burnt off creating several hours of black smoky emissions to air. Particulate emitted from heavy hydrocarbons (not gas) differs according to the nature of the hydrocarbons but will substantially include carbon dioxide implicated in global warming and other chemicals. Fletcher Challenge Energy in 1999 began using a “clean up vessel” built to separate the well stream reducing the flare to gas only to significantly reduce smoke emissions (FCE: 1999, 20).

Oil spills are generally due to fractured pipelines and generally do not represent an environmental threat unless of a substantial volume or if a blow-out occurs. This is an increasingly rare phenomenon. Formerly referred to as gushers, they occur when pressure from the reservoir cannot be contained and hydrocarbons burst up through the ground. Blowouts represent serious threats to safety and the environment. On the 20th of January 1995, Petrocorp Exploration Ltd (in a press release) advised the media that a ‘kick’ from the McKee-13 well had occurred prompting the mobilisation of emergency well control procedures and environmental equipment, the Fire Brigade and Police. Drilling muds had overflowed into nearby streams requiring an emergency clean up, and escaping gas from the blow-out was flared, where possible, but uncontained gas seeping around the wellbore warranted closure of access roads. The rig was extensively damaged but there were no injuries to workers onsite. The experience was later cited by residents in the area and residents at proposed sites as a significant factor in their opposition

to the company siting operations near their homes (Anecdotal accounts from residents at McKee, Tikorangi and Pohokura: 1998-99).

Labonne (1995, 112) notes that community concerns arise at different stages of the mineral mining development. This staged approach to considering impacts creates drivers for how and when a company interacts with the community and the impact management strategies and tools that will be required at each stage. In adapting her approach to petroleum mining five key stages can be identified (Table 3, p34).

Table 3: Labonne’s Five Stages of Mineral Mining and Associated Impacts

Stage	Impacts
Exploration	At the exploration stage seismic activity involves grid line cutting, detonation of underground explosions and creates concerns relating to shared land access routes, disruption to land use practices, damage to property and stock safety, noise from helicopters, increased road traffic and violation of tapu land. Interest is high in the outcome of seismic surveys.
Well-site construction and drilling	During well-site construction and drilling concerns are related to road safety, pollution from water discharges, use of chemicals, silting, noise, light and visual disturbance, and blow-outs. The land-related concerns of the exploration stage continue. Monitoring and employment are issues for tangata whenua, mitigation for residents, and compensation for land use is an issue for landowners.
Well testing	At the stage of well testing pollution from flaring and irregular noise engender concerns but there is also interest in the viability of the well.
Demobilisation and abandonment involve	Demobilisation and abandonment involve dismantling the rig and facilities and concerns relate primarily to rehabilitation of the land.
Production	If the well is put into production land and mineral rights become issues for Maori and landowners, and ongoing access and safety concerns are held by neighbours. Product, if transported, raises road safety concerns; if pipelines are constructed impacts on farming through the long-term restriction of land use near the pipeline, river and waterway crossings, vegetation disturbance, land desecration and safety are the concerns of landowners and Maori and other road users. The construction of production facilities raises concerns relating to noise, safety, increased and heavy traffic, the use of water, effluent and stormwater discharges, and visual impact by the wider community.

(Source – Labonne: 1995).

3.3.3 Environmental impacts, or social?

Where environmental controls are in place, most of the impacts discussed will have a minor influence on residents, if at all, and in the main they represent unfounded fears. Noise is the exception, the management of which is made complex by the variance in how individuals perceive it. Injurious effects from noise are typically expressed as “noise annoyance” which is defined as ‘the expression of negative feelings from interference with activities as well as disruption of one’s peace of mind and the enjoyment of one’s environment’ (USEPA: 1996). Sleep, recreation and family relationships may be adversely affected by noise stress. Noise annoyance is perceived as higher if the person holds the attitudes of:

- fear that the noise source might be a danger to the neighbourhood
- belief that the noise is preventable
- awareness that non-noise problems are associated with the noise source
- stated sensitivity to noise, and
- a belief that the economic activity represented by the source is not important to the community (ibid).

Environmental impacts are invariably social in effect but social impacts independent of environmental affects are created by the company through the manner in which it conducts its community relations. Poor consultation, inadequate research and communications, arrogant, racist and anti-community sentiment, non-participatory consultation and the failure to follow through on agreements have created greater public resistance than any environmental impacts. The impacts of inappropriate practice are frustration, resentment, loss of respect for and trust in the companies, and divided and embittered communities.

When Shell Australia disposed of the Brent Spar – a 14,500 tonne, over 140 metre high oil storage and loading facility – by deep sea disposal, it was unprepared by the vociferous international protests that resulted. While the company had consulted extensively with technical and environmental experts, they had not spoken to the wider community. It responded tirelessly

and consistently to protests by arguing scientific precision and regulatory rigour. In hindsight one lesson learned by the company was:

The “Decide, Announce, Defend” approach does not work. We now recognise that we were too narrowly focused on presenting the scientific risk message and failed to fully anticipate the potential angles for emotion-driven public outrage. We are moving from a “trust me” world where decisions can be made unilaterally and then defended, to a “show me” world where early pre-decision dialogue is imperative and meeting community expectations must be demonstrated (Duncan: 1998).

A staged approach to managing impacts raises an imperative for good internal communication – particularly between external relations staff and operations staff and contractors – to ensure expectations raised about impact management with communities can be met. It is critical in the determination of what constitutes an impact that *actual* impacts may not be the concern of communities. Concerns are very often from *perceived* impacts based on fear, ignorance, lack of or flawed information (from the company) and in most cases these are what the company must address.

3.4 Summary

E & P company operations are never solely benign and impact both favourably and adversely on host nations and host communities. Impacts are environmental, economic, cultural and social and occur at different phases of the operations programme. They also potentially impact for many years post operations suggesting that long-range impact management planning needs to be undertaken.

Impacts may be real or perceived by those affected. The extent of impacts depends on the willingness and ability of companies to mitigate effectively but moreover on the quality of their community relations and social assessment practices. It is evident that the perception of effects of environmental impacts such as noise and traffic tend to be regarded more negatively if the attitude towards the company is negative, and conversely tolerance is higher if the company is regarded as responsive, fair, inclusive and competent in its dealings with people.

THEORETICAL CONSIDERATIONS BEHIND APPROACHES TO COMMUNITY RELATIONS

4.1 Introduction

The nature of the relationship between oil and gas E & P companies and the societies and communities in which they operate has been influenced substantially by pressure exerted from the environmental lobby. Greenpeace which, in the 1970s took on the companies who were popularly considered to be 'trashing the planet', paved the way for many other citizen's groups. These organisations, according to Reaves (1999) discovered that, '... their strongest weapons lay in hitting companies where it hurt most – in the corporate ledger ... Multinationals like Exxon, Nike and Shell have since learned the hard way that consumer boycotts and/or protests can mean serious business (or lack thereof).'

Public approval of large companies as a result of greater environmental awareness is according to Cowe (1999) at an all time low. 'As many as two-thirds of people [responding to a British Mori poll] say companies pay too little attention to their social and environmental responsibilities.'

As a result of environmental degradation and exploitation and human rights violations inflicted by these global companies a range of legislative safeguards and guidelines for practice have developed, and internally, public relations efforts to restore consumer confidence.

In response to international pressure and in order to advance economic interests, E & P companies have developed a range of social intervention strategies that the author has broadly categorised as emanating from two theoretical traditions: Public Relations (PR), wherein the development of good community relationships has the purpose of meeting the economic

interests of the company, and community development (CD) which is based on an integrated social and economic development agenda.

Both traditions share, in name, a number of practices – consultation, communications, participation, social responsibility and impact assessments – but because of the underlying ideology these practices are enacted in fundamentally different ways, seeking different objectives and achieving quite different outcomes (Refer to Table 4, p48).

To follow is a review of the theoretical underpinnings of both traditions and an examination of the practices that have developed from each.

4.2 The Public Relations Tradition

4.2.1 Underlying ideology

The PR approach is a tool and function of corporates informed by the values and ideologies of the market found in the laissez faire capitalism of classical economics and expressed in the neo-liberalism applied in the mid 1980s in New Zealand and elsewhere. Proponents of the former argue that the market is the arena where natural freedoms and equality can be expressed. Neo-liberalism seeks to minimise the role of the state in economic development and reassert the role of the market with an emphasis on the use of rational technocratic tools (Kelsey: 1997).

During the neo-liberal period – from the mid 1980s to the current day – a significant level of power has been afforded to corporates in economic and development planning. Lloyd (1982, 171) describes this position as where:

... economic decisions intended to maximise profit and promote development are to be made in the corporate arena, and subsequent decisions about the way that the fruits of development are to be distributed will be made in the democratic arena. The first set of decisions will be made on the basis of technical expertise; the second set arrived at through a political bargaining process. The argument is premised on a belief that individuals will not

necessarily recognise their 'real' interests and therefore those with the technical expertise to discern 'real' interests must make economic decisions.

The power of these corporates was further realised in the unfettered proliferation of global transactions as trans-national corporate enterprises (TCEs). Kelsey (1997, 16) notes that:

... their superior access to finance, technology, skills and economies of scale, enabled these firms to dominate a national economy and evade its regulatory regimes ... TCEs had little interests in the social and economic consequences of their decisions. Whether they were controlled locally made no difference.

This situation led to the adoption of a structural adjustment regime based on minimising public spending, providing incentives and removing barriers to trade, encouraging foreign investment and privatisation and sale of state assets, including in New Zealand, Petrocorp Exploration and the Synfuels gas-to-gasoline plants.

New Zealand chose to implement this regime to its neo-liberal extreme (Kelsey: 1997, 19). The government set about privatising and devolving to "the community" many of its social development functions. This rejection of welfare state intervention was undertaken because, according to Pierson (1991, 41) 'its administrative and bureaucratic methods of allocation are inferior to those of the market ...' and '... it has failed ... to eliminate poverty or to eradicate unjust inequalities of opportunity.' The New Right's promises to redress these flaws in the welfare system did not materialise in the 1990s. Conversely it has produced economic, social and cultural deficits and inequities that Kelsey (ibid, 336) describes as a 'revolution – bloodless, but devastating for its victims.'

The neo-liberal economic model lauded as the panacea to social inequity did little more than promote the interests of the most economically powerful and produce amongst corporates an arrogant disregard for the nations and the communities among whom they worked. This is evidenced in minimal compliance practices at worst and a patronising "big business knows best" attitude at best. Ironically the gulf left in provision of essential services to communities has

created an opportunity for these corporates to market themselves through giving. This is indicated in the PR approach, which has a strong sponsorship focus.

4.2.2 Applied PR

Public relations has been the response to industry critics and the key methodology for communication with communities – talking to people, negotiating, handling complaints with magnanimity, strategically placing sponsorship to win over the sceptics or to reduce the impact of errors made by the company. PR is an arm of marketing and to that end is aimed at winning customers and increasing profits. Companies recognise, according to Wade (1998, 1) ‘... that community involvement is an integral part of good business and should be managed in a business-like way.’

While the popular view tarts PR as at least a little shady, the industry credits itself with having an advocacy role in communicating the public interests to the client. It is about, according to the Public Relations Institute of New Zealand, ‘... building support for a point of view ... Ill-founding bagging of the industry ... does little to promote the co-operative role that good PR people play in working towards a better mutual understanding between all the interest groups which make up our society’ (Marshall: 1999).

This sentiment is plausible given that securing good relations with the public keeps costs low. It is also reasonable given the often huge gulf in understanding between the industry and the community and the levels of fear that are often needlessly evoked.

However, as PR is predicated on an economic imperative there is little to prevent its use to manipulate, spin the truth and cover the cracks. For example, when landowners in Alberta, Canada, became tired of pipeline leaks and flaring-related health problems incurred from their tenant’s oil exploration activities and fought back, they were ‘quickly branded as “troublemakers” trying to ruin the productive partnership of industry and community that is the centrepiece of energy-industry public relations’ (Swift: 1999).

PR practices include consultation, impact mitigation, communications, sponsorship, advertising, and “social responsibility,” a business ethics approach that assumes an obligation by a company to manage the business for the benefit of all stakeholders.

4.3 The Community Development Tradition

4.3.1 Description

Community development is an alternative and comprehensive approach to working with communities that is gaining status in the E & P industry particularly in developing countries. Community development has the objective of achieving social and environmental sustainability. While seemingly incompatible with commercial interests it must be underscored that community development encompasses economic development as a means to providing social equity and sustainability therefore economic goals are as vigorously pursued as in the PR approach but in a way that simultaneously advances social goals.

4.3.2 Theoretical Underpinnings

Community development was traditionally informed by socialist theory. This theory advances the goals of social integration, social justice and individual self-fulfilment arguing that the free market system obstructs these goals because it is ‘inequitable, undemocratic, unjust and inefficient ... To maximise individual and social well-being, to advance freedom and reduce disparities between rich and poor, socialism promotes both economic and social growth’ (Shirley: 1982, 17). State intervention is deemed imperative to moderate the excesses of the free market and to promote social values of equality, community, democracy and social well-being.

According to Khinduka (in Shirley: 1982, 20) community development emanated from three modern phenomena:

Firstly the emergence of a ‘third world’ composed of poor, rural-agricultural nations characterised by mass illiteracy, a traditional outlook on life, low levels of health and housing and widespread despondency. Secondly, a dissatisfaction in industrial and post-industrial societies with their increasingly impersonal and remote government apparatus.

And thirdly, the discovery and visibility of poverty in so-called affluent societies, coupled with a new pride among minority groups in their own cultural identity, and the vocal even militant insistence of many groups that they should participate in decision-making processes that affect them.

The emergence of the field of development studies has expanded the application and discourse on community development. Development studies appeared, according to Brohman (1996, 9), after the second world war and focused on macro-economic problems of global inequities between rich and poor countries. Interdisciplinary contributions from economics, sociology, anthropology, political science, social psychology, geography and other disciplines have resulted in hybrid theories of development (ibid, 10).

Cornerstones of community development are the notions and practices of participation and empowerment. Through participation and empowerment strategies those who are most affected by industrial development are able to determine the role they play in activities, collaborate in decisions about matters of common concern and share equitably in the benefits of development.

Experience shows that problems such as underdevelopment, inequalities and poverty cannot be solved by top-down strategies such as neoliberalism ... but require a shift to alternative approaches based on popular empowerment (Brohman: 1996, 345).

According to Friedmann (1992, 33), empowerment involves achieving social, political and psychological power. Collectively these forms infer a) the capacity – information, knowledge and manual, technical, administrative, managerial and planning skills, participation in social organisations, and financial resources – required to meet household and community objectives; b) access and inclusion in external decision-making processes and the building of collective strength; and c) an individual sense of potency expressed as self-confidence to act to achieve household and community objectives.

Participation practices acknowledge in their application the dynamics of gender in the development process, the cultural diversity of communities and the necessity to respond in a way

that does not perpetuate inequities and preserves cultural integrity. It is a bottom-up or 'development from below' philosophy that facilitates the active involvement of affected communities as opposed to the imposition of the developer on a passive or relatively powerless group (Chambers: 1983, 190).⁴

Finally the field of sustainable development is also integral to community development in that it directs development practitioners to seek a causal relationship between social development and the physical environment. According to Brohman (1996, 305), worsening environmental problems have altered the focus of sustainable development away from a technical fixation 'towards a more holistic focus which stresses the contextual specificity of environmental problems and includes a people-orientated agenda based on the needs and rights of local people.'

Sustainable development is popularly defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (World Commission on Environment & Development: 1987, 80). Within the E & P industry, sustainable development needs to be addressed at both the macro level, where downstream hydrocarbon consumption impacts on the global environment, and at a community level focusing on the ability of communities to maintain a relationship with their social and cultural environment without this being compromised by a company's activities. The 'indigenisation of development thinking' as discussed by Brohman (1996: 337) identifies the need for sustainable development approaches to include rather than preclude indigenous involvement, and to reassess major Western-based development paradigms and encourage polycentric development approaches informed by local traditions, traditional knowledge and popular creativity.

4.3.3 The difficulties in discerning a CD approach in practice

A community development role for corporates is more likely to come from those companies that espouse a social responsibility position or from those companies that are pressured to do so. Shell Prospecting and Development Peru (SPDP) developed the Camisea Project, employing

⁴ Participation is discussed more fully in Chapter 6.

social scientists to consult and involve local communities in planning of the siting of wells. Using participatory planning methods with the native communities of Nuevo Mundo, Cashiriari and Shivankoreni, agreements were reached on compensation that was to be 'durable, sustainable, useful to the whole community, and manageable by the people, and it should provide a net long-term benefit' (Shell Intl Ltd: 1998). The Nuevo Mundo community was to receive, in exchange for use of their land and an airstrip, a primary school, health post, two water wells, school package, college education scholarships, a waste management system, mothers' club hall, advice on development projects, solar electricity for community buildings, monthly rent, a TV set, parabolic antenna and power generator, workshop room with hand tools, and a study on urban planning. The delivery of programmes was orchestrated in conjunction with partnerships enacted with local NGOs, government bodies, educational institutions and churches (ibid).

In addition to the benefits provided through community agreements, the project workers, visitors and contractors required a Health Pass to enter the Camisea area indicating that they were immunised in order to protect the community from introduced diseases. Health baseline studies undertaken led to a range of health initiatives including a vaccination programme, the establishment of health posts and conjoint NGO health programmes. Transport by air to operating sites as much as possible was done to minimise contact with indigenous communities. Environmental Impact Assessments were translated into the vernacular and explained to residents, and expatriated workers were guided as to appropriate cultural social behaviour while working in the area (ibid).

Meanwhile, in the middle of the Amazon rainforests of Brazil, E & P company, Petrobras has become a 'friend of the forest' earning in June 1999 an ISO 14000 certificate for environmental management and the BS 8800 certificate for attention to health and safety of workers and the local community according to (Chetwynd: 1999). An on-site native plant nursery provides plants to replace trees lost during land clearing for drilling and pipeline construction and to beautify the wellhead after the rig has been removed. Petrobras attests to having eradicated malaria from the region and set up a number of health and education initiatives. It pays local taxes and has a policy of employing locals.

Shell in Nigeria, are applying CD practice to work in operations-impacted communities in the Niger delta. A symposium held in 1998 brought stakeholders together to:

- Provide a forum to design and agree on realistic and effective approaches to the CD programme
- Create opportunities for a better understanding of CD needs and issues
- Enhance the community ownership and sustainability of the development process initiated under the programme
- Promote the culture of dialogue and discussions for resolving problems that may arise in the process of implementing new approaches in the CD process.

The symposium, with facilitators from Nigerian universities, looked at three critical areas of CD:

1. Socio-economics with emphasis on poverty alleviation, employment and micro-credit facilities
2. Human resources development with emphasis on education, health and nutrition situation in the delta
3. Natural resources development with attention paid to issues of development and conservation of resources notably, fishery, forestry, land use and land tenure.

The focus of Shell in supporting communities is 'on long-term goals in partnership with communities. More emphasis is being given to community participation and direction, with expert independent help through agencies and non-government organisations' (SPDC of Nigeria: 1998).

Independent NGO accounts of Shell's performance in Camisea have been both critical and supportive of the Shell approach. The Rainforest Action Network (1997) believes there is a tremendous gap between Shell's rhetoric and the reality and that the company is 'violating its agreement with indigenous groups in Peru by storing toxic waste and polluting rivers' effectively '... putting public relations before human need and ecological responsibility.' Local communities have complained that little in compensation was paid and funding to community programmes was only 'token' (Wheeler: 2000), and amounted to nothing more than a Christmas present

(Chatterjee: 1997). Agreements were considered to have been signed in haste, and the local community had no chance to consult a lawyer. Further activities of Shell have 'exacerbated the existing divisions among the Machiguenga who have traditionally been represented by rival organisations' (ibid).

A biological inventory undertaken by the Smithsonian Institute, commissioned by Shell, confirmed that the biodiversity of the Camisea region is 'unsurpassed in the world' and '... a region with some of the last remaining uncontacted indigenous communities on earth' and therefore should not be mined (Netherlands Committee for IUCN: 2000, 1). The committee recommended as an alternative national industry the sale of the carbon storing capacity of the two million hectare region, the biodiversity of which provides climate stabilisation and other benefits to the world. The valorisation of maintaining an intact stock of biodiversity would entail active involvement of the local communities, an income, and the ability to interact and adapt to externalities in their own time instead of being forced to adapt at the pace of a major foreign investment project. The Netherlands Committee acknowledged the 'model way in which the company conducted its operations in the region' but considered the ecological and social risks were too great to proceed (ibid, 4).

Earthwatch believed the company 'is making an effort to do the right thing in Camisea, going far beyond normal industry practice' (Martyn: 2000). However a coalition of NGOs (Kretzmann et al: 2000) criticised the company's consultation on the basis that the process is fundamentally concerned with a discussion on how to proceed with gas field developments, not if they should proceed. 'While consultation and openness are laudable, they are meaningless unless all options – including the option to say no to the project – are on the table.'

4.3.4 Comparing PR and CD approaches

The table below, constructed by the author, identifies how the CD and PR approaches used in the petrochemical industry inform and predict the attitudes and behaviours of companies in relation to communities and ultimately the outcomes of that interaction.

The PR approach has an “us and them” quality to it, the basis of a relationship between the community and the company being one of conflict and competition. It can also be paternalistic – “the community just doesn’t understand the business we are in” and tokenistic, wherein the minimum focus necessary is put into community relations as it is not “core business.” Inherent in the CD approach is a moral, rather than a strictly economic or statutory obligation, to work with industry affected communities. It takes a systematic and professional approach to community relations drawing on applied social sciences and development practice rather than responding to communities with a vague notion of “common sense” as inferred in the PR approach. While both approaches have a commitment to economic development, PR views economic development as an end in itself while CD views it as a means to social development.

Table 4: Comparison between the PR and CD approaches

Factors	Public Relations	Community Development
Company view of the community	A 'thorn in the side'; stakeholder in the companies operations; potential opponents or advocates; beneficiaries	Vulnerable citizens whose rights must be respected; business partners; less powerful relative to the company
The company views itself in relation to the community as:	A member of the community; a benefactor	A powerful, resourceful, professional and responsible company
The community is identified by:	Using existing and secondary data	Undertaking primary research
Social impacts are determined by:	Previous experience with other communities; complaints and opposition to resource consents	Undertaking social assessment
Impacts are managed by:	Mitigation on a case by case basis as they arise	Deferring to an impact management plan devised in consultation with and agreed to by the community
Communication tools are viewed as:	A means to appease and inform, create loyalty and avoid dissension	A means to educate, enhance participation and gain local knowledge
Consultation is:	A requirement of the RMA	A communication tool; a means to ensure community needs and sentiments are reflected in project plans
Consultation requires:	Negotiation, mediation and 'people' skills	Facilitation, presentation, advocacy and bicultural communication skills
Underlying theoretical approaches	Marketing, communications	Human rights, participation and empowerment, community development
Underlying philosophy	Good neighbour relations, minimal expenditure; neoliberalism; implicit ideology	Community development - social responsibility, social justice, social integration; transparency of intent - policy driven, explicit ideology
Methodology	Ad hoc, reactive, case-by-case, information as required	Planned, policy driven, proactive; social assessment, participatory planning, commercial relationships with the community; investment in sustainable social programmes
Benefits to the community	Donations, industry-informed public, compensation	Sustainable social programmes; industry-informed and educated public, long-term relationships through consistency of approach
Risks to the community	Divisions and inequities created through disparities in company sponsorship and perceived favouritism; raised and unmet expectations due to lack of policy; non-sustainable investments	The company withdraws prematurely from the region. Lack of management buy-in. Company restructuring and loss of staff with project history
Benefits to the company	Minimal investment required if community is supportive of the company; advocates can be used to suppress opponents	Excellent relationship with communities; sound social investments; up front costs; no or limited opposition
Risks to the company	Excessive compensation/mitigation demands; obstruction; bad publicity; poor returns from investments in community projects; backlash from inappropriate and ill conceived 'giving'; delays to work programmes	Determination of a community to reject E & P if legally able to despite benefits and good relationships

The following sections describe the strategies used by petrochemical companies in dealing with communities in light of the theoretical orientation and approaches described above.

4.4 Social Intervention Strategies

4.4.1 Communications

Communications strategies are integral to both the PR and CD approaches although the rationale and emphases differ.

Suncor Energy, a Canadian oil company has developed a list of values and beliefs that they assert underpin their stakeholder relationships. These 'values-based communications' include:

- Treat each other and our customers fairly and with respect
- Respect individual and cultural differences
- Care for and work to improve the communities in which we work.

Suncor Energy pursue a communications strategy of proactive consultation with environmental groups, indigenous communities, unions, government and other company stakeholders in which they 'seek out, listen to and address the concerns expressed ...' (Lee: 1998). While the principles outlined are compatible with CD, the approach is clearly PR given that: 'The value for the company is in avoiding court hearings when regulatory approvals are sought, thus maintaining drilling schedules and remaining within budget' (ibid).

PR places a strong emphasis on written and media communication that enhances the company's image and provides operations-specific information. The focus in CD is on highly targeted educational material developed in conjunction with an educational programme that is aimed at empowering communities through developing their knowledge of the company and the industry. This transposes an authoritarian style of communication with a participatory style that draws out

and benefits from local knowledge utilising appropriate learning methodologies⁵ (Chambers: 1983, 190).

4.4.2 Sponsorship and social investment

Sponsorship is a tool of PR wherein a company invests in its local community as a gesture of magnanimity and to market the company to improve its public and shareholder image. For example, to counter criticisms, particularly relating to greenhouse gases and air pollution from carbon emissions and human right violations, energy companies are increasing sponsoring events that enhance their image as a “member of the community,” or commonly, “Partners in the Community” (Chevron: 1998; Shell: 1998), or they champion environmental projects. BP changed the colour of its logo to environment-green; its service stations in New Zealand have recently converted to solar energy. Fletcher Challenge Energy is supporting a coastal revegetation project in North Taranaki (FCE: November 1999).

Increasingly support of human rights projects has diverted sponsorship dollars as well. Chevron (1998) have invested in a water project in El Salvador involving piped water to households, in programmes for the elderly, health projects in Angola, a communications project in Zaire and social projects in Kazakstan (including giving New Year’s gift packages to needy citizens). All of these initiatives are advertised to the world via the Internet and undoubtedly aired at every other opportunity to score PR points.

Social investment is the CD alternative to sponsorship. It is a planned programme of contributing to communities and it is impact assessed. This means the overall effect of providing resources is determined in the context of the wider long-term social good. Accordingly it places priority on sustainability of development projects that affect a change in the capacity of communities. It supplies the fishing rod, not the fish. The determination of the level and type of contribution (what sort of rod; if in fact a rod is required) for social investment programmes is made in participation with the recipients. A social investment programme could include business and employment contracts as well as development projects. The Shell Peru programme in the

⁵ See also Prashinig *Diversity is Our Strength: The Learning Revolution in Action* (1996)

Camisea area purportedly used a social investment to contribute to the community. Projects were decided in consultation with the local residents and NGOs and were assessed based on the overall impact to the community well-being and sustainability of the funded projects (Shell: 1998).

The danger of inappropriate and unsustainable 'giving' has been borne out in numerous indigenous communities where such activity has undermined the cultural lifestyle. Giving paradoxically can become a negative impact of E &P industry operations. In small ethnic nations of North Russia subsistence economies were 'developed' by job provision effectively creating a working class and creating 'deep social alienation, passivity and pessimism...' factors which were then judged to be 'remnants of a tribal patriarchal past' (Pika and Prokhorov: 1988). In one community local authorities, using money issued for economic and cultural development, 'are offering besides oil pipes, graders and cars which will doubtfully reach the indigenous northerners though they can only partly use them, a thousand pairs of skis with titanium stocks, 200 typewriters, 500 pocket calculators and the same number of Kampakt toilet bowls' (ibid). Academic sponsorships, given by many companies (and aid programmes) may contribute to the loss of technical expertise to urban centres effectively depleting regional and rural peripheries of much needed resources (Chambers: 1983, 5).

4.4.3 Consultation

Consultation with communities and tangata whenua is a legal duty in New Zealand bound by the RMA as part of the resource consent application process. While the obligation is on the consenting authority to undertake the consultation, it is often undertaken by the applicant. Consultation includes the following elements as identified in case law (MFE: 1999, 13).

- It is the statement of a proposal not yet finally decided upon
- It includes listening to what others have to say and their responses
- Sufficient time must be allowed and genuine effort must be made
- There must be made available by the party obliged to consult enough information to enable the consultee to be adequately informed so as to be able to make intelligent and useful responses

- The party obliged to consult must keep its mind open and be ready to change and even start afresh although it is entitled to have a working plan already in mind
- It is an intermediate situation involving meaningful discussion
- The party obliged to consult holds meetings, provides relevant information and further information on request, and waits until those being consulted have had a say before making a decision.

From that same case it can be said consultation is not:

- Merely telling or presenting
- Intending to be a charade
- The same as negotiation, although a result could be an agreement to negotiate.

Suncor Energy (Canada) operate according to principles reasonably consistent to those implicit in the publicity material issued by many other companies but is more explicit about them. The principles are:

- The company assumes stakeholder input adds value to the planning process
- Each stakeholder's value system will be respected and individual input valued
- The integrity of the regulatory process will be preserved
- Information will be shared freely, in an open and transparent manner
- Suncor strives to avoid disagreements with stakeholders that occur as a result of misunderstandings
- Stakeholders will be involved early in the process
- Stakeholders will be provided with timely, accurate and complete information
- A system of ongoing communication will be maintained.

Both sets of principles are consistent with both the PR and CD traditions, the differentiation can only be determined in light of the overall application of the principles in practice and the impacts that practice has on the community.

The RMA-directed principles are developed in light of a need to protect communities' rights to meaningful involvement in industrial development planning while Suncor's are based on a desire to alleviate conflict and expedite the consent approval process for the commercial benefit of the company. Consultation, according to Suncor:

... enables the company to move more swiftly through the application and approvals stages of its major capital development programmes because local concerns are already incorporated in the company's proposals and planning documents (1997).

PR based consultation generally falls short of acknowledging a responsibility for, or determining, the long-term impact of the company's operations and presence in a community. It may fail to address a power dynamic whereby the company with vast resources of money and time is consulting with communities operating in an ad hoc, reactionary, part-time way as volunteers who can be worn down over time. In the event of the desired win-win outcome not being reached through consultation, the company is far better placed to meet its objectives through litigation. Community stakeholders will often accept whatever the company is offering, because they know or believe the company is likely to win regardless of their misgivings or objections.

Typical consultation practices of E & P companies are believed to be fundamentally flawed as a mechanism to assure that indigenous rights are fully respected (Project Underground: 1998) because:

- a) companies and government bias 'consultation' towards obtaining local acceptance of the project;
- b) they fail to disclose critical information to communities about petroleum impacts; and
- c) communities are not advised that they are being 'consulted.'

Maori in Taranaki were deeply critical of consultation practices where companies assumed that their lack of a response inferred acceptance of the project, insufficient time was given to respond, confidentiality was not maintained, information given by the company was inaccurate, and

consultation was undertaken with only selected members of the iwi (Anecdotal accounts from hapu members: 1998).

The Ministry for the Environment (MFE), in its consultation guide, note that the purpose of consulting varies according to the project advocate, the council planner and community representatives (1999, 14). The results of a survey undertaken by MFE and presented in *Striking a Balance: A Practice Guide on Consultation for Project Advocates* are reproduced in Table 5.

Table 5: The Purpose of Consultation

Reason Given	Project Advocate	Council Planner	Community Representative
Ascertain community views and opinion	1 st	1 st	1 st equal
Achieve a better project	2 nd equal	2 nd equal	1 st equal
Inform the community	2 nd equal		2 nd equal
Meet RMA requirements	2 nd equal		
Obtain community acceptance		2 nd equal	
Achieve consensus on the project			2 nd equal

(Source – Ministry for the Environment: 1999, 14).

It is unsurprising to note that, while there is accord on the purpose of ascertaining community views and opinion, the project advocate has emphasised PR style reasons and failed to acknowledge the community benefits of consultation.

4.4.4 Social and environmental assessments

Environmental considerations are becoming integral concerns of petroleum business processes and increasingly Environmental Impact Assessment (EIA) reports, and Assessments of Environmental Effects (AEE) are routinely prepared as a requirement of host country regulatory requirements. This movement in the industry is attributable to a number of pressures including:

... heightened international awareness of the environmental impact of energy development, the rapid growth in international environmental law and policies during the last two decades, publicity surrounding the industry's poor environmental performance in the past, and national regulatory responses to environmental pressures. The growing influence of NGOs in matters concerning the environment and indigenous land rights, and their targeting of the oil industry, has contributed to this process as well (Wagner: 1998, 13).

The emergence of separate environmental bodies where traditionally sector-specific government agencies (such as energy and mining authorities) managed environmental affairs has led to conflicting regulations, lack of co-ordination, and lack of enforcement in developing countries. In Peru, for example there is no national agency with overall authority for environmental protection; in others the environment agency has no jurisdiction over energy projects (ibid, 14). In New Zealand amendments to the Resource Management Act are proposed to address problems in the effective implementation of national environmental standards (Upton: 1999, 1).

Penalties for infringements of environment regulations and consent conditions are universally adopted and applied though, where monitoring is acknowledged to be inadequate or absent, enforcement is not made.

Increased effort to regulate the environmental impacts of E & P is contributing towards improved compliance and environmental performance within the industry. However the proliferation of environmental regulations may, according to Wagner (1998), push up project costs and contribute to the termination of marginal plays (producing or potentially productive wells or fields).

AEE are required in New Zealand to meet the conditions of Schedule 4 of the RMA which addresses the provision of AEE, stating that subject to any policy statement or plan those preparing an AEE should consider 2(a) 'any affect on the neighbourhood and where relevant, the wider community including any socio-economic and cultural effects.' The focus in AEE is inevitably on the impacts on the physical environment with only cursory references to or acknowledgement of social impacts. From the author's observations physical environmental

factors are given considerably more weight than social factors by regulatory authorities, due perhaps to the greater difficulties in measuring and managing social impacts, and the absence of social practitioners to undertake social impact assessments.

In a submission to the Ministry of Environment on proposed amendments to the RMA (1999) the New Zealand Association for Impact Assessment (NZAIA), argued that 'the environment' needs to be defined as: 'Ecosystems and their constituent parts' including 'natural resources, the built environment, people and social systems'. The Association argues that '... the issues raised by people about effects of development proposals are inevitably defined socially – that is in terms of the well-being and sustainability of people and their communities. Water pollution, noise, dust, traffic etc are all social concerns, not just technical matters resolvable by technical "experts" alone' (Fitzgerald: 1999, 1).

The NZAIA embraces a CD framework that integrates social and environmental assessment as critical accompaniments to development planning, advocating that consultation and participation are fundamental to the preparation of policies and plans, and to the assessment of environmental effects. A PR approach to the development of an AEE is one of minimal compliance unless public pressure warrants a more thorough response. Social assessments are not required under the RMA therefore are not undertaken.

4.4.5 Compensation and mitigation

Compensation is paid to landowners for use of their land by E & P companies and their contractors to conduct seismic surveys, construct pipelines, accommodate well-sites, and operate production stations. Payment is generally in the form of a lease based on compensation for loss of production, or it is determined by negotiation, government guidelines or benchmarks. Compensation is also payable for damage to property – public or private.

Mitigation involves initiatives taken by the company to lessen impacts, and compensation to landowners or residents for loss of enjoyment or use of facilities due to excessive noise or other negative impact that the company has not been able to eliminate. Compensation is usually a negotiated cash-based settlement but other arrangements are common. Anecdotal accounts from

staff at Fletcher Challenge Energy describe an occasion where production station noise levels exceeded the levels allowable in the resource consent conditions. The company mitigated by transporting the house of an affected neighbour to a quieter area on their farm.

An integrated CD approach would require mitigation and compensation to be fair – that is consistently applied – transparent, and based on both consultation and research that is predictive in nature. This is unlike a PR approach which is reactionary and applied in an ad-hoc manner, not to those who are affected, but to those who complain of effects.

The determination and delivery of compensation in the CD approach would be participatory. The Land Access Code (1997), instigated by the Natural Gas Corporation and later developed by the Petroleum Exploration Association of New Zealand in conjunction with the Federated Farmers, is an example of participatory consultation regarding compensation. The industry as represented by PEANZ and the landowners as represented by the Federated Farmers of NZ agreed to a mutually favourable set of conditions and fees payable to farmers in order to expedite the settlement of leases and agreements, but also to enable transparency and consistency in dealings. While this has contributed to improved relationships between the two parties, the Ministry of Commerce has argued that price fixing in this manner is anti competition (Interview: Garry Gordon, Land Liaison Officer, FCE, 2000).

4.4.6 Corporate Social Responsibility

The concept of corporate social responsibility (CSR), as implemented by Methanex Ltd, belongs to both PR and CD. As a marketing tool it appears to be hugely effective – a win-win supreme. Fortune magazine reports annually that good ethical practice, integrity and social responsibility give big business a competitive edge (Springhall: 1999).

Proponents of the CSR approach to business ethics believe that corporations have societal responsibilities that go beyond maximising profits. It is argued that because corporations are so powerful, they have an obligation to assume social responsibilities: ‘Corporations should be managed for the benefit of their stakeholders: their customers, suppliers, employees, and local

communities, as well as their owners. Corporate leaders bear a fiduciary responsibility to all stakeholders' (Silbiger: 1993, 71).

As a philosophy with the objective of improving the human condition – as opposed to a tool for increasing profits – social responsibility heralds a fundamental shift away from the Milton Friedman economic school of thought on the role of big businesses to an integrated socio-economic model of community development. Friedman believes that business's sole duty is to produce profits within legal parameters determined by government. A profitable business according to this school benefits society by creating jobs and through taxation to support the government's social policies (ibid, 72). As social equity, as argued, is not created by profit maximisation and, as governments do not necessarily act in the social interests of their citizens, this shift in thinking is potentially of greater significance when companies that are exercising social responsibility programmes are active in developing countries and communities. In developed countries articulate and resourced communities, guiding legislation and stable governments affect to a large extent the ethical behaviour of companies. Where these factors and players are absent, companies are freer to act as they please. Ethical companies can play a role in modifying or mitigating the poor performance of weak governments and supporting human rights.

Multinationals such as The Body Shop have shown that responsible companies can also use their clean reputation to improve their balance sheets. These companies have moved beyond the PR hype of social responsibility and allowed external social auditing to take place and the results to be made public. Conversely companies such as Walt Disney and Nike have otherwise been exposed by Oxfam and the World Development Movement for appalling factory and staffing conditions. Ethical investors groups are rallying to align themselves with responsible business. This danger of exposure and loss of shareholder loyalty has sent British companies rushing to join the ethical trading initiative. Increasingly companies are reporting not just on financial performance but on their environmental and human rights performance (Cowe: 1999).

The merging of social, environmental and financial objectives is creating a 'triple bottom line' writes Cowe (ibid) who nevertheless is still wary about the intentions of oil companies: 'Is it

progress if cannibals start eating their victims with cutlery instead of using their hands, if oil companies start worrying about the environment while still pumping billions of gallons of carbon dioxide into the air?' (1999).

Balancing the social, environmental and financial bottom lines is the challenge for E & P corporates and will underpin their decisions on where to invest. Investment in developing countries may be put in the too-hard basket because the expectations to intervene in the event of weak governance to ensure social and environmental benchmarks are met may be too daunting.

As it is, zealous (or perhaps reasonable) socio-economic political regimes have upset the industry. Two oilfields in the Canadian province of Newfoundland according to Valebrokk (1999) were impeded rather than aided by politics. The government insisted that foreign contractors bidding for work establish partnerships with local companies in order to build expertise within the province. However the government's involvement in the choice of development concepts for the fields and its encouragement of the most labour intensive solutions was seen to be counter-productive by the oil industry. The fact that subsidies were involved was interpreted to mean that decisions could be made on a socio-economic rather than purely commercial basis resulting in, according to the industry, 'higher development costs, lower profitability and use of out-of-date technology which undermined prospects for future developments' (ibid).

Shades of social responsibility are also evident in the inclusion of sustainable development on the agenda of modern companies. Dr Chris Gibson-Smith (1998) of British Petroleum, in an address to the Cambridge University Engineers Association, suggested the industry:

Welcome the opportunity which sustainable development offers to align industrial and social agendas better. We need to be part of the solution to the complex questions associated with future global energy supplies ... We wish to be engaged on major public policy issues such as climate change, environmental protection and human rights ... And further ... Companies cannot be separate from the societies in which they operate. Today we must show that everything we do, and every product and service we provide, is delivered in an environmentally and socially sound manner.

CSR is positioned within both the CD and PR approaches. For the former it is a means for companies to use their influence and resource to empower and contribute to environmental sustainability and social well-being. Social responsibility as a tool of PR is more a means to build public support through the use of a socially attractive concept to make the company look 'good.

4.4.7 Pressure and ...

Other traditional methods of gaining community acquiescence used by oil explorers and producers have involved the application of pressure through 'courtesy and a bottle of whiskey', a PR-based approach used in land access arrangements in New Zealand in the 1970s and 80s where the company legally needed to do no more than inform farmers of its intention to come on to the land. The 'chicken- slaying approach' purportedly used in dealings with landowners during the pre-construction days of Synfuels (See Case Study 2 in Chapter 5), where residents were apparently bullied and frightened into leaving their land, is related to the 'blankets and musket' approach of the NZ colonial land acquirers. Neither approach fits within the PR or CD traditions and neither approach was evidenced in contemporary community relations practices of surveyed companies. As a means to an end, pressure has been successfully used to gain resources albeit by unethical and illegal means.

4.4.8 ...Power

While the PR machine has tidied up the shop windows of major oil companies, another story not often recounted is that of the communities who don't have a website or other means to communicate to the world the impact of the oil exploration in their communities. In developing countries weak regulatory and accountability systems, low media attention and poor human rights standards can and have enabled powerful E & P companies to trample at will the social and environmental conditions of host communities. The imposition of massive industrial projects on indigenous peoples – without their consent and often against their will – has led to a loss of lives, territory, economic stability and control over their own development (Project Underground: 1998). It has been noted by a US State Department (in Clay: 1993, 66) that: 'Where indigenous peoples clash with development projects, the developers almost always win.'

Shell Petroleum Development Company (SPDC) violated a number of environmental and safety codes for 30 years in Nigeria, according to Greenpeace (Rowell: 1991), endangering the lives of neighbouring villagers. Flaring, for example, was occurring sometimes within 100 metres of village homes causing damage to plants, and depositing thick chemical-filled soot on buildings, which caused soil damage as it washed off. Drinking water and fisheries were also polluted from oil spills. Shell responded by denying any such damage and advising that flares are located or relocated away from human habitation. Environmental groups noted that pipelines laid above ground have rendered arable land unusable. Unlike the EIAs prepared in other countries, Nigerian villagers were not consulted with nor had they seen an EIA. Further, little or no compensation for land use was made to landowners and the community programmes, so well touted in the company's PR brochures, were not provided for Nigerian villagers despite the billions of dollars generated for the company and the government through hydrocarbon production (Rowell: 1991).

The disempowerment of mining communities affects men and women differently. In studies on the impacts of mining and logging in the developing Pacific nations of Papua New Guinea (PNG) and the Solomon Islands, Scheyvens & Lagisa (1998, 51) note that 'women tend to be excluded from decision-making processes, and they have limited access to royalty payments and business and employment opportunities which emerge'. Yet women were found to endure greater hardship from, and have greater responsibility for redressing, the negative social and environmental impacts of the industry operations. These impacts included social problems – male criminal activity, domestic violence, male drunkenness and the absence of fathers – which have been contributing factors to cultural breakdown and civil unrest. The authors believe that the socio-political destabilisation and protests caused by mining and logging could have been circumvented by the companies by monitoring and minimising community effects through working closely with local women. The companies instead opted to hire private security forces, and avail themselves of government paramilitary services.

Overt abuses of power and inflicting suffering on communities is not a PR activity however the tradition enables power abuses to endure because PR is typically undertaken when the company's ability to operate is threatened by public feeling or behaviour or when compliance legislation is in

place. Power abuses are anathema to CD, which seeks to empower the powerless and improve socio-economic conditions for all players, not just for the operating companies.

4.4.9 Social auditing

Social auditing, as pioneered by the New Economics Foundation in London, assesses the social impact of an organisation relative to its own aims and those of its stakeholders. Applicable to all stakeholder groups, the technique – more fully, social and ethical accounting, auditing and reporting – is a more transparent form of social responsibility. It is based on financial auditing techniques therefore must, according to Visser (1998, 4), be ‘repeatable, comparable, independently undertaken, systematic, representative in content and the findings publicly disclosed.’

- The stages of the auditing process are:
- Identify stakeholders and their values or aims
- Identify indicators and targets of performance in relation to these values
- Design the method for assessing performance against indicators and targets (for example, using survey questionnaires, focus groups, and so on)
- Carry out the assessment
- Prepare ‘social accounts’
- Verify social accounts by an auditor or audit group
- Distribute social audit to stakeholders.

The technique is mainly used by fair trade and environment-based organisations and as such is a CD tool, but it is gaining wider acknowledgement as pressure comes to bear on other companies to account for their social impacts and wider social costs.

E & P companies are increasingly using tools of accountability. Methanex makes its community perception survey public and FCE is producing a Health, Safety and Environment Report for shareholders. These initiatives can be either CD or PR activities depending on how they are used. If used to inform the public as tools to improve social/environmental performance they are

consistent with a CD approach; if used to show how well the company is doing, to appease critics or attract shareholders, they are firmly PR grounded.

4.5 Conclusion

Two broad traditions exist in community relations with regard to the petrochemical industry. The PR approach is based on a profit driven, top-down development imperative that regards good community relations as good business, while the CD approach is a people-first, bottom up approach to social and economic development.

PR is a viable model for the delivery of advertising and public information, for marketing a company. It is not an appropriate methodology for working with operations-affected communities whose livelihoods and quality of life may be adversely affected by E & P operations. PR is received as glib and shallow when communities want to be treated with respect, fairness and compensated adequately and consistently, and to have a real input into decisions that affect them. A PR approach will be respectful, fair and inclusive only if it is in the interest of the company to be so. A CD approach is respectful, fair and inclusive because it is in the interest of people to be so. As a result of the RMA, communities in New Zealand now have the legal right and heightened expectation that they will be afforded genuine – not PR – consideration by companies.

Regardless of whether company involvement in communities is motivated by a philosophy to improve the planet, is a reaction to discontented members of the public, is the result of legislation, part of a marketing effort, or is an unplanned undertaking, every intervention will impact in some way on that community. This infers, or should, a responsibility on the company to act in a planned and conscious way.

Altruism through sponsorship, while perhaps worthy in intent, is commercially motivated and therefore will be targeted at projects that give the company a high profile and engender the greatest public support. It does not necessarily target the areas of greatest social need and may contribute to inequity. Altruism can exacerbate dependency and undermine sustainability in projects. A short-term positive impact – such as provision of jobs to a community – can have

significant long-term negative effects when the drilling or construction phase of the company's operations cease and wage workers and support services are deprived of income. Further, altruism can cause divisions in communities by being seen to discriminate in favour of some members over others, or be seen as a tool to buy support from dissenting members.

Because the profit maximisation objective of the PR approach underlines every interaction with the community, a level of distrust from the community is perpetually present. Every act of giving is primarily to benefit the company. Education is a process by which the company can enhance the public's understanding of the industry for the purpose of alleviating resistance to operations based on ignorance of how the business operates. Donations and sponsorship are essentially buy-offs and a means to promote the company. Consultation and liaison are simply the means to gaining resource consent approvals and access to land for the company. The notion, long expressed by the community that "the company only talks to us when they want something" is consistent with the PR philosophy. The use of terms like social responsibility, participation and sustainability to positively enhance the image of the company as socially driven often fail to register in affected communities for they are seen for what they are; efforts to positively enhance the image of the company.

The political shift to the New Right away from a significant role in welfare provision to a market-based technological imperative has invited a perception of communities as less rational than corporates and thus incapable of determining development priorities, and it has elevated the importance of economic goals at the expense of social goals. PR is an inevitable reflection of these trends, perpetuating and intensifying a power imbalance between the company and the community. It has created a conflict in that communities are distrustful or actively rejecting this approach, are refusing to co-operate, or using direct action and the courts to undermine companies and attempt to correct the power imbalance. The adoption by companies of a CD approach based on social policy is both a more effective means to attract communities to work co-operatively with the company and a more equitable social arrangement.

The following chapter will consider the social practices of two oil and gas E & P companies and one production-only company in Taranaki with the aim to identify the approaches they use when engaging with communities.

COMMUNITY RELATIONS PRACTICES OF PETROCHEMICAL COMPANIES IN TARANAKI

5.1 Introduction

This chapter explores the social impact management and community relations practices of petrochemical companies and whether a PR or a CD approach is predominantly used. Two E & P companies and a production company were surveyed in Taranaki, namely Fletcher Challenge Energy Ltd (FCE), Shell Todd Oil Services Ltd (STOS), and Methanex NZ Ltd and an interview was conducted with the Petroleum Exploration Association of New Zealand (PEANZ) to identify:

- The socio-environmental issues faced by each company
- The policies in place and strategies used to assess and manage social impacts from the companies' activities
- How social performance is measured.

Information was gained from public documents supplied by all three companies. Interviews took place with the FCE manager of the Sustainable Business Services team responsible for public relations, land liaison, safety and the environment; former permitting officers; and the land liaison and environmental advisors. Information is also drawn from the author's prior experience as a communications advisor with the company. Interviews took place with the Public Relations Executive, Third Party Liaison Engineer and Environmental Advisor at STOS, and with the Public Affairs Manager at Methanex.

Operations-affected community members were interviewed to gain insights into how impacts affected communities during the establishment of Methanex (then Synfuels) and during seismic and drilling operations. These interviews did not take place while the author was working at FCE.

5.2 The Companies Surveyed

5.2.1 Fletcher Challenge Energy Limited

The largest onshore owner and operator in Taranaki is FCE, a New Zealand based (though 60% overseas owned) company with operations in New Zealand, Canada and Brunei. New Zealand operations are centred on Taranaki with exploration interests extending in 1999 to the East Coast.

The primary function of FCE is oil and gas exploration and production. These upstream functions of the energy industry were reaffirmed as the company foci in 1999, a year in which a strategic reorientation saw the sale of downstream interests in Natural Gas Corporation, the Taranaki Combined Cycle power plant and the North Island Cogeneration Project. The company has retained ownership of the Challenge Service Station chain.

Fletcher Challenge Energy assets include 19 million barrels of oil equivalent in six producing onshore oil and gas fields of McKee, Tariki, Ahuroa, Waihapa, Ngaere and Kaimiro and the offshore Maui gas field which is operated by STOS. Reserves have declined steadily since 1995 (Fletcher Challenge Energy Annual Report: 1999) although finds in March 2000 from the offshore Pohokura well hold promise for increased gas reserves.

5.2.2 Shell Todd Oil Services

Shell Todd Oil Services Ltd (STOS), with 330 Taranaki-based staff is owned by Shell-Petroleum Mining Company (Shell) and Todd Petroleum Mining Company (Todd). STOS is the operator of the offshore Maui field and smaller onshore Ngatoro and Kapuni fields, on behalf of the owners of these fields. Maui is owned by Todd (12.5%), Shell (18.75%) and Fletcher Challenge Energy (68.75%), the majority shareholder. Downstream interests of Shell International in New Zealand

include among others, Carter Holt Harvey and Shell Service Stations. STOS has recently begun an extended production programme in South Taranaki.

5.2.3 Methanex New Zealand Ltd

Methanex Ltd is a wholly owned subsidiary of the world's largest methanol company – the Canadian based Methanex Corporation. Other subsidiaries are based in Chile, British Columbia, Alberta and Louisiana.

Formed in March 1993, Methanex New Zealand owns and operates two petrochemical plants and a port loading facility in Taranaki and has a marketing division in its head office in Auckland. At its Motunui plant, natural gas from the Maui and Kapuni fields is converted into crude methanol. This crude is then converted into high quality methanol for the world market. The plant has the capacity, though this is currently mothballed, to convert methanol into unleaded gasoline.

The Motunui plant was built between 1982 and 1985 and a second Methanex plant in the Waitara valley came on stream in 1983 also converting gas to methanol for the export market. Two hundred full-time workers are employed at the Taranaki plants, and a further 50 contractors making it the second largest employer in the region.

The plant is important to NZ contributing substantially to export earnings, contributing around \$40 million dollars to the Taranaki economy and supplying 10 percent of the world's methanol. Methanol is used as a component in resins, insecticides, anti-freeze, artificial rubber, dyes and textiles. It can also be used as a fuel extender and an octane enhancer to replace lead in gasoline (The Daily News: February 1996, 2).

5.3 Findings

5.3.1 Involvement with the public

The key areas of involvement for FCE and STOS with communities are in the acquisition of resource consents, land access, impact mitigation, tangata whenua consultation and public

relations. Methanex's dealings with the public focus on impact mitigation and maintenance of community relationships.

Operations affected communities are identified by the companies as typically landowners (those who lease land to the company), residents living or working nearby operations including schools and community facilities (roughly within a one kilometre radius), and tangata whenua who exercise manawhenua – traditional authority – over the land and waterways. NGO environmental groups such as the Forest and Bird Society, Greenpeace and energy lobby groups, local authorities and statutory bodies such as the Department of Conservation interact with the companies around specific issues or in the processing or monitoring of resource consents.

Methanex and FCE have set up community advisory groups – Methanex as part of its Responsible Care programme – to maintain relationships with operations-affected communities, and all three companies manage complaints and information requests from individuals.

The companies interface with the wider community through providing sponsorship, industry related information, specific public relations and through giving presentations at community functions and talks in schools.

5.3.2 Social policy

The companies were surveyed as to the policy framework that informed their social relations practices. This is fundamental to a CD approach, which requires internal buy-in to a philosophy of CD, and provides public documentation so as the community knows what they can expect from the company.

All three of the companies surveyed had a written health, safety and environment policy. FCE and STOS have a one-page statement with very general allusions to environmental principles. These are primarily directed at taking action to enhance or remedy performance related to the physical environment with no direct references to the social environment. For example: 'Shell

Todd Oil Services Limited is committed to keeping people free from harm, protecting the environment and being efficient in the development and use of resources' (STOS: 1999).

Methanex's environment policies are incorporated into a Responsible Care Programme and the company is explicit about accommodating the community in their guiding principles. For example there is a commitment to 'Recognise and respond to community concerns about the use of hazardous substances,' and 'Operate ... in a manner that minimises impact on the environment and protects the safety and health of employees ... and the general public.' Specifically a community "right to know" policy 'recognises the need and right of the public to know the risks associated with our operations and our products present in or transported through communities.' A community awareness and emergency response code of practice requires that Methanex have an active community awareness programme, provide training to staff and community participants, undertake consultation, maintain an up-to-date listing of community representatives and develop a communication process and system for measuring and assessing the awareness programme (Methanex NZ: 9-12).

None of the companies has an explicit policy, set of guidelines, principles or position statement on how they will interact with residents or tangata whenua with respect to consultation regarding impact mitigation/management. Consultation practices are largely determined by local authority application of consultation rulings as determined by the preference of the specific territorial authority or by the Environment Court based on the RMA.

A Land Access Code developed by the PEANZ Inc and the Federated Farmers of New Zealand Inc is used by both STOS and FCE. It bases company dealings on a "Good Neighbour Policy".

This states:

Exploration and pipeline companies have obligations to be 'good neighbours' when seeking access arrangements with landowners/occupiers. This means that the exploration company needs to fully advise the landowner of:

1. The reason why access is required
2. Where the company needs to go on the property

3. The sites the company needs access to
4. The area the company needs access to
5. The compensation formula that will apply under the circumstances

(Land Access Code: 1997, 6).

5.3.3 Social assessment

Social assessment (SA) provides baseline information from which social intervention strategies can be developed with, and social provisions made for, the target community/s.

None of the three companies indicated that social assessments were undertaken exclusively but a statement of social impact and evidence of consultation undertaken with affected groups are included in AEE (Assessment of Environmental Effects). AEE are undertaken by all companies as part of the consent application process. Social impacts form part of the AEE in accordance with the 4th Schedule of the RMA.

Identification of communities with whom to consult is done by FCE through secondary means, namely use of the Land Information database, prior knowledge and other informal means. Methanex undertakes an annual survey to identify stakeholders. STOS has a large number of employees that live in operations-affected communities and uses informal networks extensively to gain community information and relay communications between residents and the company.

Methanex ascertains the impacts or effects on the community from information gained from community attitude surveys, which the company has undertaken since 1993. These are done every two years using local Polytechnic students to call 500 residents in the area surrounding the plants. The questions posed of the community relate to the respondents' knowledge of what Methanex does, the benefits provided to the community by the company, environmental and social performance. Social impacts are determined from the survey results.

FCE and STOS determine impacts from experience, as they arise through the consent-based consultation process, in the course of liaison with landowners, and from complaints fielded from

operations-affected communities. STOS sometimes carries out further consultation after resource consents have been lodged.

5.3.4 Practitioners

The expertise of staff assigned to deal with the public can indicate the value placed on the community relations role within a company. Consultation requirements under the RMA have determined a need for greater public involvement and company responsibility to the public, and would therefore require, as this thesis maintains, the employment of specialised practitioners to manage the dynamics of these relationships.

Community relations, iwi and land liaison functions are undertaken by the PR Executive at Methanex. The Public Relations Officer at STOS deals with sponsorship and information requests and the Third Party Liaison Engineer and Environmental Advisor undertake iwi consultation and deal with land access. At FCE iwi consultation is managed by the Sustainable Business Services Manager responsible for health, safety, communication and environmental matters, along with the company's Environmental Advisor. Land liaison is a dedicated function. All three companies acknowledge a role in community relations for all company staff.

Only one of the seven people chosen to undertake social practice has related qualifications; the Environmental Adviser at STOS has a social planning qualification in addition to environmental science. The other staff members are qualified in journalism, science, and engineering or in the case of the land liaison officer, a background in the farming industry. None are Maori. From 1983 to 1998 FCE engaged a Maori public relations executive also responsible for iwi liaison.

5.3.5 Land Access

Land access is critical to onshore operations. FCE has a dedicated land liaison employee who is responsible for negotiating access to land and maintaining relationships with landowners. This role has been at times contracted out to surveyors or consultants, particularly for seismic surveying when access to multiple land holdings is required.

Land access issues were historically resolved by a “gentleman’s agreement,” an informal, verbal undertaking to compensate for loss of productivity in some mutually agreeable way and to rehabilitate the land when it was no longer required. Access to land was virtually guaranteed by virtue of the Petroleum Act of 1937. In 1991 however the Crown Minerals Act (CMA) came into being to address an imbalance that had given considerable discretion to the explorer to access private land and left the landowner with few options of redress. According to PEANZ Executive Russell Plume (1997, 1) the CMA brought a change in philosophy regarding access to property, which gave the landowner significantly more control of the use of their property. It also heralded more formal consultation processes. ‘Although there had been a high level of de facto consultation before 1991, consultation became de jure after that time’ (ibid: 2).

The informality of land access arrangements was not always satisfactory. According to Plume (ibid: 3):

Landowners were sometimes surprised to find vibroseis trucks (used in seismic surveys) crossing their land when they had expected something quite different. And explorers often found themselves embroiled in lengthy and ... acrimonious debates with landowners over damage claims ...

The practice methodology of land liaison was historically, based on, ‘One-on-one personal direct contact and letters – manners do work. It was not just a case of waving the petroleum act, “we’re coming on your land tomorrow, move your cows”’ (Interview: Plume, 1999). Most landowners didn’t require compensation other than fixing or cleaning up. They were happy to co-operate if it would benefit all New Zealanders and they were interested in and excited about having a well on their property.

Landowners have recently (1998) expressed resentment about the frequency of seismic surveys; since the 1960s many farms have hosted up to eight surveys (Personal communication: 1998). This change in attitude and the arrival of the CMA resulted in the development of the Land Access Code. This document details issues of importance to the parties, outlines best practice guidelines and provides model lease and easement documents and comprehensive compensation

formulae. This system is the basis of a generally amicable relationship with landowners, however there have been exceptions.

FCE has had considerably more contact with landowners than the other surveyed companies and subsequently has learned lessons from inadequate consultation. In addition to the general issues raised above FCE suffered from a significant shift in landowner attitude resulting from the sale of state-owned Petrocorp Exploration, to private hands, FCE in 1988. At that point the attitude towards the company was more positive; landowners felt themselves to be part owners of the company. However with privatisation landowners were less kindly disposed to the company and sought to enter more beneficial commercial arrangements.

The handshake system of verbal agreement suffered from frequent management and staff changes. (STOS also attest to this). 'People forgot the commitments that were made and disputes arose,' according to former permitting officer with Petrocorp Exploration, Mike Hodgkinson (Interview: 1999). Landowners did not 'like Americans' – they were resentful of foreign involvement in the development of what they perceived to be a national resource – and in the mid-80s, when 'a grandiose expansionist path' saw a significant increase in the number of wells, insufficient attention was given to the increasing number of landowners that the company would be dealing with as a result. A dedicated land liaison officer was brought to deal with the aftermath of land-related disputes.

Disputes in the 1980s arose with landowners through lack of planning, lack of guidelines and a drive for expediency that tended to throw money at problems. Examples of disputes include inappropriate siting of facilities in relation to homes: in one instance a well was built 150 metres from a house. While the occupiers could endure this for the duration of the drilling they were alarmed to discover that if the well made a discovery and was put into production, the company could be utilising the site for 20 years or more. On another occasion a production station was built 85 metres from a private home and dissent resulted in the company eventually resituating the building elsewhere on the farmer's property (Anecdotal accounts from FCE staff: 1999).

In another case, property on which FCE held a lease was sold and the new owner, unaware of the prior arrangements, became obstructive, demanding and receiving a sealed race into the property and upgrading to cattle yards. He began making daily charges for the use of the race, charges that were accepted by the company because production testing was expected to last only 90 days. This however was extended and eventually reached 365 days, during which the landowner raised his per diem charges. He then claimed monetary compensation for noise effects and accepted payment for undertaking construction of a culvert, work that was never completed (Anecdotal account from FCE staff: 1999).

Many stories from the 1980s and the “cowboy” style of land access related to internal communication problems, often between contractors and the company. While the company assured the community of certain standards, it was not always a given that contractors would comply. Gates were left open, instructions to not traverse parts of land were ignored, damage was caused to fences and so forth. People did not always get messages or, in one case, received unintended messages. A particularly insulting name applied by a project leader to a farmer who had decided not enter into a lease agreement at a critical time was conveyed to the land liaison officer over a radio telephone, unfortunately in the presence of the farmer concerned (Anecdotal accounts from staff: 1999).

The result of misjudgements by the company in this period yielded another set of problems. As the desire was to continue drilling programmes to time, problems were generally resolved by paying, often extravagant compensation to landowners to avoid delays and opposition. While the nature of the agreements was made ‘private and confidential’ rural community culture ensured that such dealings became public knowledge and extreme resentment rose as to the high levels of discrepancy in mitigation payments and deals. They set unmanageable precedents.

Hodgkinson (Interview: 1999) cites the problem, familiar in social science, of the difficulty of quantifying the value of a fair deal on land access, and the unwillingness by the company to undertake this. The Land Access Code, the RMA and the CMA have created a policy framework that has transformed the approach to land access. FCE in the 1990s adopted a more participatory style in that landowners are consulted at the site selection stage to provide input into the location

of a new well. Improved communication between project teams and liaison staff ensures sufficient time is made available to negotiate the terms of the lease and that landowners are fully cognisant of the impacts of the proposed drilling operation. Landowners are acknowledged as critical to operations and much of the land liaison function entails maintaining good relationships through visitation, newsletters, Christmas gifts, involvement in the company's Community Advisory Group and opportunities to undertake visits to production stations and well-sites.

5.3.6 Resource consent-based consultation

To gain resource consents each company must deal with the appropriate regulatory authority and undertake consultation with members of the community deemed by those authorities to be affected by the proposed operations.

Although consultation by the applicant is not a statutory requirement it is deemed by the courts 'prudent that an applicant undertake consultation prior to the lodging of any resource consent application' (MFE: 1999, 15). Alison Jappinen, Environmental Advisor, STOS (Interview: 2000) notes that case law under the RMA has now set precedents for consultation for resource consents 'in stone'. Clause (h) of the Fourth Schedule of the RMA states that the AEE should include 'an identification of those persons interested in or affected by the proposal, the consultation undertaken, and any response to the views of those consulted.' The companies surveyed generally considered the undertaking of consultation by themselves, as opposed to the consent authority, to be more expedient as part of its preparation of an AEE to accompany the resource consent applications.

There is a directive also to those exercising functions and powers under the RMA to take into account the principles of the Treaty of Waitangi and 'A duty to consult is one of those key principles' (ibid, 16).

Consultation for consents is undertaken by the sustainable business services manager and environmental advisor at FCE, the environmental advisor and third party engineer at STOS and by the PR manager at Methanex and at FCE, or by independent consultants. Consents for E & P are regularly sought for land use, discharges to water and air and the disposal of drilling wastes,

and renewals of existing consents. Whereas E & P operations are based on many, and an increasing number of sites, Methanex operations are fixed and therefore consents are occasional, requiring less frequent consultation with a reasonably static geographic community. Similarly STOS operations are mostly offshore where consultation is not generally required.

Affected parties are generally deemed to be the landowner, residents and tangata whenua if there is likely to be physical affects. For example, for a resource consent to discharge to a freshwater body, affected parties will be those downstream of the discharge in question. If a consent application is to be publicly notified, any affected or interested individual or organisation may make a submission to the consent authority on the proposed development. Councils determine whether a consent is to be notified or non-notified, however the resource consent will be non-notified only if all parties give their approval.

All companies cited that contact with communities took place at the time the resource consent was required. There was an acknowledgement by each that it was beneficial to have established prior relations with those communities. According to Jappinen (Interview: 2000) consultation for new consents is undertaken by personal visitations 'so people know who I am,' and follow-up is undertaken after the consents are gained. Consulted parties are asked if they are happy with STOS' performance and advised to ring at any time if they are not.

If objections or concerns are raised during the consultation process, attempts are made to mitigate these by way of undertaking research, implementing procedural changes and other initiatives to accommodate the interests of affected parties. For example, FCE have commissioned research on the effects of air emissions on public health and the impact of noise and light from flaring on dairy goat behaviour. They have relocated houses and implemented a noise reduction programme on rigs in response to community concerns. STOS has reduced both the amount of flaring and smoke from flaring over the years for its on and offshore operations. Jappinen (Interview: 2000) feels strongly about 'doing deals' with affected parties. 'It doesn't solve the real environment and social problems. It is important to apply solutions to real problems rather than throw money at it. This approach doesn't lead to social cohesion.'

Consultation required under the RMA, while time-consuming and frequently fraught with difficulties for the companies, has empowered some communities as highlighted in the discussion on land access. The following case study, based on an interview with environmentalist and local community member Ray Watenbach, illustrates the pre-RMA style of “consultancy” used when the Synfuels plant (now owned by Methanex) was being developed. It should stand as a reminder of the value of mandatory consultation for resource consents.

Case Study No.2: Synfuels

When Synfuels gas-to-gasoline plant, the predecessor to Methanex, was developed environmentalists joined forces with iwi to protest and eventually thwart plans to site a sewerage outfall on to mataitai (seafoods of Maori) beds off the coast of Motunui. Consultation strategies were very different back in 1981.

In the days of the National Development Act, pre RMA, if you wanted to express an opinion you had to register as an objector so the first contact we had with the company was in court. Land was taken under the NDA for the development of the plant. They frightened small holders off their properties, wanting to buy everything because of the noise of the plant. One family wanted to stay but had chickens killed and windows broken. The message was get off or else. Some sold before they were pushed. About 25 households were displaced.

Te Atiawa reefs were a source of food, and mana, to an iwi and deserved protection but the company could not see that it was polluting them. Local authorities were in the pockets of the politicians. They were prepared to smooth the way to allow big business to do what they wanted to do. Aila [Taylor, kaumatua] would invite them to marae meetings and feed them seafood, so they could understand the importance of seafood. We researched water treatment plants worldwide where petrochemical industries existed. We knew they had the capacity to leave wastewater clean enough to swim in.

5.3.7 Iwi liaison

Taranaki has a complex iwi structure comparative to other parts of New Zealand with eight to ten tribes and numerous hapu exercising manawhenua (traditional authority) over often contested land areas.

There is a history of iwi protest against the oil industry in Taranaki, centred around iwi participation in approving and monitoring land use practices, environmental concerns, and ownership of minerals. In 1994 Te Putahitanga o Taranaki, iwi advisory committee to the Taranaki Regional Council, expressed concerns to the then Minister of Energy, Doug Kidd, requesting that no oil and gas exploration and related activities be permitted on Mount Taranaki and surrounding ranges. (Letter from the Minister of Energy: December, 1994). Oil spills from offshore drilling in April and May 2000 generated objections from Te Runanga o Te Atiawa (The Daily News: May 2000, 2).

Taranaki iwi are pursuing claims for compensation for the loss of oil and gas resources nationalised under the Petroleum Act of 1937. South Taranaki iwi won the right in May 2000 to an urgent Waitangi Tribunal hearing over their claim registered in 1999 (The Daily News: May 2000, 2). Hapu of the Tangahoe iwi registered a claim in November 1995 claiming the Crown 'fails to recognise the prior ownership of Tangahoe iwi's mineral resources within its rohe' (Claim 142: November 1995).

Protest from Maori over ownership of mineral resources and claims for compensation are not new. Objections to the Petroleum Act were made in 1937 and supported in parliament by the Rt Hon Joseph Coates who stated that:

The Treaty of Waitangi gives Maori people the complete right to everything that is below the surface of their land and everything above it.' And 'I say to the Minister that he will be wise to reconsider that portion of the Bill which deals with royalties and as it affects the Maori people' (Debate in the House of Representatives: 1937).

The resultant Petroleum Act 1937 provided for no more than that District Maori Land Boards could represent Maori people on the exercise of powers under the Act, but 'even that provision, which acknowledged a need for consultation with Maori, was not continued in later legislation' (Waitangi Tribunal: 1990 in a memo to the Minister of Maori Affairs.) In December 1987 a contention in respect of natural gas was included in the claim to the Waitangi tribunal of Sir

Ralph Love and others advanced on an action in the High Court seeking review of the Government's decision to sell the Crown's shares. The bases of the action were:

- The rights of Taranaki tribes to petroleum, gas and other minerals beneath the surface of their ancestral lands as a consequence of the rangatiratanga guaranteed in the Treaty
- These rights in respect of confiscated lands
- The entitlement of tribes to compensation for land confiscations, and that any sales of the Crown's shares in Petrocorp or sale of gas rights will remove those assets as a possible form of compensation (ibid).

Iwi consultation is undertaken by all three of the companies surveyed. Relationships between local Te Atiawa hapu and Methanex are positive. This is attributed by the company (Interview: Gerry Kennedy, Public Affairs Manager, 1999) to a slow and dedicated relationship-building initiative involving consultation, regular contact with the local marae, involvement of the marae chairperson on a community advisory panel and a series of contributions from the company towards marae development projects. There is also less likelihood of disputes arising for Methanex as the company is not dealing with frequent new land development and therefore resource consent applications requiring consideration and approval by the hapu or iwi as there is for FCE and to a lesser extent STOS.

STOS currently deal with two South Taranaki tribes. Their experiences with these iwi and hapu have been mixed. Current attempts to gain resource consents for a new well, Ngarewa, have engendered 'resistance and negativity' according to the company (Interview: Geoff Ward, Third Party Liaison Engineer, 1999) and they are awaiting Environmental Court hearings. Opposition to the consents is largely based on assertions that the company is insensitive to Maori cultural beliefs and that well-site activity will adversely affect the environment. Their approach has been to work with consultants to make contact by writing to hapu authorities, meeting with elders, conducting meetings on marae, and mitigating by way of providing evidence of environmental safeguards. They undertook a ground penetration study to discover evidence of archaeological significance. This was not however done in consultation with the hapu who considered the study offensive (the background to the Ngarewa well is presented in Case Study 7 in Chapter 6).

A STOS representative spoken to is frustrated by expectations of Maori and perceives, 'Maori think we don't do enough' (Interview: Ward, 1999). He also noted frustration at the position of Maori on the controversial payment of royalties for oil: 'This is a government issue – not ours,' however the company will provide information to Maori on the issue. Efforts to incorporate Maori values into the company's activities include the blessing of the offshore Floating Production Storage and Offloading facility and giving it the Maori name, 'Whakaaro Pai', and commissioning research on wahi tapu. They have given donations of cash and kind, for example providing engineering advice and gravel for a driveway on a marae and meeting expenses resulting from consultation. As a result of provisions to Maori, Ward says an 'internal backlash from staff' has been engendered though this was not a perception shared by the company's environmental adviser (Interview: Jappinen, 2000).

FCE have a greater involvement than Methanex or STOS with iwi and hapu and has been involved in a number of contentious issues. Of note, in 1998, two hapu took grievances relating to the drilling of the Pohokura-1 well to the Environment Court. (This is presented as Case Study 4 at the end of this chapter). The company has made efforts to gain an appreciation of Maori issues by having key staff attend cultural awareness, Maori language and decolonisation courses. It has financially supported a number of significant initiatives for Maori including tertiary

scholarships and the purchase of a language laboratory for the Maori studies department of the Taranaki Polytechnic.

5.3.8 Community participation, education & communications

Participation as defined by the CD tradition (and as discussed fully in 6.3) denoting a facilitated involvement with, and empowerment of operations affected community members, is not practised in this sense by the three companies, although shades of it appear in community advisory group models. Education as mooted in the CD approach as a means to empower communities is not applied, although written information is freely given. These communications practices are evident, particularly during consultation, through the dissemination of publications and activity updates to communities.

STOS works in an informal way with the communities based around the long-established Kapuni Field and Oaonui Production Station, primarily through having a physical presence in the area and maintaining relationships with landowners and residents built up over many years. STOS considers that the long-term tenure of many staff – ten years and more in many cases – has enabled this familiarisation to occur. As a result the company deals with few complaints and is able to resolve them without argument or recourse to litigation (Interview: Jappinen, 2000).

Methanex similarly has built up long-term relationships with its local communities through regular contact, a stable and single point of contact, and the use of a Community Advisory Panel (CAP). This panel was set up in 1996 as part of the company's Responsible Care Programme to provide a forum for discussion of community and company issues. It is made up of representatives from landowner, tangata whenua, resident groups and the local school. Both the members and the company assert the CAP is valuable in keeping the community informed of developments at the plant and dealing with impact issues as they arise (Interview: Kennedy, 1999). The following case study, taken verbatim from Taranaki's *The Daily News* newspaper, is an example of the company's involvement with community mitigation.

Case Study No. 3: Methanex Mitigation

A retired couple Keith and Evelyn Jonas complained to Methanex about a foul stench wafting from the methanol plant to their property, about 1 km to the south. The emissions originated from the cooling towers and were carried to the house by northerly winds. Methanex's response was to invite the couple to the plant to identify the source of the offensive odour. The result was months of trying different additives with the cooling system chemicals. The answer came not from refining the existing chemicals, but from American company BetzDearbon, which came up with a brand new chemical. The new chemical not only eliminated the odour, but reduced copper discharge by 50%, reduced other chemical usage, extended equipment life, increased production, and will save 280 million litres of water per year. It will save Methanex more than \$600,000 each year and won it the Return on Environmental Partnership Award

(The Daily News: August 1999, 3).

FCE also maintains a presence and availability in its communities but endures more problems, particularly historical grievances. If stability of staff is an indicator of successful relationships, this may account in part for these unresolved grievances. Two of the three principal community liaison staff members at FCE have been with the company for less than two years and the third member has been there for two years (at the time of writing).

The Methanex Community Advisory Panel has been emulated by FCE which piloted a Community Advisory Group (CAG) in 1999 for the landowners and residents based around, and to the north of, the McKee Production Station and oil field. If the CAG is successful in meeting its objectives of providing a frank interchange of information and dealing with issues, it will be replicated in the more southern Kaimiro and TAWN fields.

FCE produces a monthly community newsletter giving updates on field developments, the company's sponsorship activities, and providing general news and educational articles on the company and the industry. Methanex neighbours receive a quarterly newsletter. FCE also mails activity updates to residents informing them of significant events in their area that may incur impacts such as irregular noise, increased traffic, the use of helicopters or a revised work

programme. During the Mangahewa seismic programme in 1997, an 0800 number was supplied to the community on fridge magnets enabling them to contact the company 24 hours per day.

According to Gerry Kennedy, PR Manager, Methanex (Interview: 1999), good networks are critical to getting things done and getting information out.

Community expectation has changed. Companies are saying they are good. Communities are saying, “prove it”. They are more educated. Companies used to say, “They wouldn’t understand it” or, “They’ll only use it [information] against us; say nothing”. However, we’re only as good as our last mistake. If we have an accident and are found to be negligent, the community will look at us differently even though we have an excellent safety record.

The Responsible Care Programme has made a huge difference to the way Methanex does business according to Kennedy (*ibid*).

Previously we worked hard to improve quality and safety but never thought outside the boundary fence. We were only responsible until the product had left the boundary in pipes or tankers. Customers? Who were they? Now it’s a cradle to the grave approach. A problem with the ship is a Methanex problem. In the past we never audited our suppliers – now we do supply assessments. We never checked who lived on tanker routes.

Responsible care strategies also include providing an 0800 number for public to notify of transport spills. Methanex also trains fire services to deal with chemical fires. The programme operates throughout the company internationally.

We have to take all our principles in with us. If we are selling in China for example where young children are used [for labour] and there are poor safety standards, instead of saying “we won’t sell to you” we work with them, explaining, teaching, if necessary providing equipment (*ibid*).

In 1998 FCE produced *The Story of Oil* as an educational resource booklet for schools and a promotional tool for the region, and promoted its use with a school competition to raise awareness of the industry. In 1999 it launched a company website. STOS and Methanex operate public information centres at the Oaonui production station and Methanex plant respectively. FCE provides site tours of its rigs and production stations for members of the public on request.

5.3.9 Sponsorship

Sponsorship is a PR activity but, as none of the companies used a formal social investment strategy as in used in the CD model, sponsorship was assessed with the view to determining whether the company funds were going into community projects that would be considered under a social investment plan such as community facilities, sustainable employment generation or environmental projects.

Each of the companies provides sponsorship and cash or in-kind donations. These are either provided in response to requests from the public, or are sought strategically to enhance the public's perception of the company.

STOS reports it maintains a low profile as a sponsor because it is only an operator on behalf of the owners of the fields and because it has a low public relations budget – around \$30-40,000 per annum (Todd has its own sponsorship budget):

We would like to improve our community profile. We very much wanted to fund the Taranaki Festival of Arts and the cardiac suite at the hospital. People see STOS and industry taking from the public and they want something back or out of it' (Interview: Margaret Milne, Public Relations Executive, 1999).

The company supports the Taranaki Life Education Trust, a beach education programme in schools and the annual Around the Mountain Relay. Additionally company time is given to participation on school boards, community organisations and as judges and for a school Science and Technology Fair. Surplus computing and office equipment is gifted to social service groups. A helicopter flight to the Maui platform was given as a science fair prize. The company is

involved in a school partnership programme with two local schools for which it provides work experience to students, provides technical assistance, and engages students in work projects, for example, graphic design. According to the Environmental Advisor STOS is considering several conservation projects, one of which is a planting programme on a beach reserve at Oaonui (near the company's production station), which is breeding habitat for the endangered New Zealand dotteral (Interview: Jappinen, 2000).

Methanex emphasises environment, safety, health and education when providing sponsorships and donations. It also provides in-kind donations, for example, providing scaffolding to a Waitara marae. When the plants were built, dollar for dollar subsidies were given to the community in the form of development levies amounting to around \$6-9 million.

The problem with the subsidy approach was that the Tikorangi Rugby Club gained but not social programmes. The company had no say in the allocation of money. Allocation was not sustainable or strategic. There were no long-term benefits for Waitara or the marae. In the old days (10 years ago) PR initiatives were at the bottom of the ladder. Now the PR person is on the senior management team. This change of thinking by CEOs has led to PR being an integral part of how the company operates (Interview: Kennedy, 1999).

Fletcher Challenge Energy has invested in major community facilities such as New Plymouth's Aquatic Centre and Stratford's Kings Theatre, a Maori educational scholarship programme, and the Polytechnic language laboratory. Traditionally social services, sport and arts orientated projects and organisations were recipients of smaller grants but there is an increasing emphasis on projects that directly benefit operations-affected communities, such as Maori development, environmental and rural school projects.

5.3.10 Measuring social performance

Measurement of the effectiveness of interventions is a critical component of SA and should ideally take place throughout the cycle of an intervention programme. Companies were assessed as to the forms this took and the degree of emphasis placed on this function.

Measuring the social performance of the company is not a routine function of FCE. The tendency is to reflect on actions and attempt to redress error. A stakeholder audit was completed for FCE in 1997 as part of the work of external consultants engaged to assist the company's overall communications strategy. Stakeholders were identified as landowners, iwi, well-site residents, local authorities, NGOs and contractors. The same agency undertook a survey of Maori relationships interviewing both iwi representatives and company staff to gain a perception of the attitudes held by each.

Methanex undertakes a biannual community audit involving telephone interviews with samples from New Plymouth, Inglewood, Urenui and Waitara townships. The 1999 survey results indicated that there is a high level of awareness of the company and a perception that its presence benefits the province economically and it has a negligible effect on the environment. Given that the survey is one of perception, it is limited in providing information on actual social effects. Methanex also surveys employee satisfaction.

STOS does not undertake formal surveys of its performance in relation to the community. Because of the relatively low scale of onshore operations and related population size, liaison staff gain a "climate reading" based on complaints, objections and feedback from the community, which it believes gives a fairly clear indication of its effectiveness or otherwise.

The following case study describes events that took place when FCE sought resource consents for a proposed well-site near the Motunui coast. The interview that follows gives an account from the perspective of one of the hapu involved. It highlights past practices of the company, many of which are being addressed, and the impacts of these actions on the community. It also identifies ineffective social intervention practices. Background information was gained, and assessments made, by the author while employed by FCE.

Case Study No. 4: Pohokura A

Pohokura P1 was the name of the first proposed well to be built on the Pohokura A well-site on the Motunui coast. The greenfield site was selected by geologists and geophysicists based on data gathered that indicated it to be the apex of a potential new gas field, Mangahewa. The landowner

was receptive to the land being leased by the company and two hapu identified as tangata whenua were approached to gain endorsement for the use of the site.

An AEE was prepared and the community – local residents and hapu – were advised of the company’s intention to proceed with the well. This ‘fait accompli’ approach as opposed to a participatory/consultative approach predictably (to a social scientist), incited resistance and opposition and the company spent several months engaged in discourse with the purpose-formed Lower Turangi Road Residents Group, two hapu and environmental groups. Expensive months spent in pre-hearings of objectors’ submissions, mitigation and consultation failed to prevent an Environment Court hearing. Resolution was gained through settlement arrangements and resource consents were eventually granted to proceed with the well.

The Lower Turangi Road residents objected to the well on the basis that it would disrupt their rural coastal lifestyle through excessive noise and create health problems from flaring. The company argued that the proximity of the well and the duration of drilling would not result in significant disruption. Regardless, a noise reduction programme was introduced to minimise noise produced during drilling. Research was commissioned that indicated that flaring would not cause air pollution and these findings were presented to the group. They were received favourably but with suspicion from some. The company however agreed to design and construct a separation vessel, which would involve separating heavy hydrocarbons produced during well testing so that flaring would only be of clean burning natural gas.

Ngati Rahiri hapu objected to the siting of the well in close proximity to an urupa and former pa site. The company responded by agreeing to shift the site 100 metres and this was agreed to by the hapu. Otaraua Hapu Trust objected to all resource consent applications on the basis they violated provisions relating to kaitiakitanga and threatened environmental safety.

Even though the company reacted positively and invested significantly in efforts to accommodate interests and mitigate concerns, the approximately 18 month process involved in gaining resource consents was fraught with frustration, hostility and the company was unable to prevent the Environment Court hearing. What went so terribly wrong?

1. No social assessment was undertaken prior to the company moving into a community that had no prior relationship with the company. Had this been done, the company would have discovered:

2. There were a number of residents who lived in the area who were not farming but had chosen to purchase property that afforded a peaceful rural and coastal lifestyle.

3. There were not two, but at least three active hapu who claimed a traditional relationship to the land, and the area was previously heavily populated by numerous other hapu of Te Atiawa. Ngati Rahiri who are generally regarded as the tangata whenua of the land in question were not the original inhabitants and there was an underlying discord among the iwi about this. The hapu member who was consulted regarding the original listing of the well-site did not have authority to approve of the site location (and may not have intended to provide it).

4. There were two factions of Otaraua hapu who were heavily engaged in lobbying the Crown for recognition of a mandate to represent the hapu.

5. Environmentalists, who had been extremely active in opposing the development of Synfuel's gas to gasoline plant (now Methanex) also at Motunui, lived in the area. They were capable advocates and highly critical of the industry. The area was also utilised by many recreational beach users.

While the company took care to provide information to the community through documentation and visits to operating rigs and other facilities much of the information provided was inaccurate and incomplete. It was not uniformly provided and an information-giving approach through public meetings and one-on-one encounters failed to provide the education and thus reassurance in the drilling programme necessary to engender support.

Liaison staff members were not trained in community development so there was no discernible model of working with the community in participatory planning, education and mitigation. As a result ad hoc methods were engaged, the community felt picked off and divided, it did not have a complete and reassuring understanding of the drilling programme and the reactionary approach to mitigation and this lack of professionalism created a lack of confidence in the company to manage the community's interests.

Because the company did not have an understanding of community processes it reacted with frustration and, in one case hostility, toward the community.

Criticisms levelled at the company at the time were that it did not listen, did not understand or respect the community, did not understand community processes, did not understand Maori and

appeared to be actively seeking to divide the community through meeting one group's demands over another.

Otaraua Hapu Trust - Dialogue from an interview with Tom Hunt, FCE liaison member for the Trust

In the early 90's FCE began making resource consent applications around the Waitara area. Huge interest was generated in Maoridom as to the ramifications for tangata whenua of the mining licences. Those of us (hapu members) who had experience in the oil industry were contacted to become involved in discussions. We feel that there was, and still is, a misconception by the company that issues were not considered in depth by Maori.

In 1995 FCE undertook seismic surveys during which interest was extremely intense because many sites significant to us would be encroached upon. FCE released maps indicating the placement of lines every 60 metres over several kilometres of Otaraua rohe. Lines 400 metres apart with 15metre deep holes drilled into which explosive charges would be set off. Impacts were feared especially by those unfamiliar with explosives. People feared that holes would be drilled through urupa, ceremonial sites, former dwelling areas or damage areas where Maori continue to get water or gather vegetation for spiritual rituals and food.

Many meetings with hapu were held to discuss what was learned and considerable energy was expended to discover the true impact of these activities. The company was not trusted to give an accurate report on impacts. There was significant distrust because no efforts had been made to develop a relationship with Maori and because of the historical experience of Maori with big business. We had no reason to trust them. They would provide us with scientific material that our people didn't understand, people who were used to being shafted by outside institutions. The company seemed dismayed that their rationale and justifications were not accepted at face value. Giving us highly technical documents equates to giving us no information. The company wanted us to trust their iwi liaison man but he was from the Taranaki iwi. Why would we trust him? We felt the company had the attitude that "He's a Maori; he'll do".

The company came out to talk to the hapu in relation to the land. We don't know who the person was and they couldn't later identify him either. We met with the company and at our first hui insisted that parameters be set. We would interact on the basis of four principles: respect, confidentiality, recognition and equality. They [company representatives] committed to these principles and information was released to them about the location of wahi tapu and other spiritually sensitive matters. Within two weeks at a regional council hearing in Stratford much of that information was put on an OHP and viewed by 50-60 people from the wider community. It was obvious that principles would not be involved in dealings with FCE.

Many sites are peculiar to specific groups – usually whanau – and have great personal significance, beyond a dollar value. There are lots of secret locations where outside people fossick for and remove our artefacts and taonga. They regard them as only having a value if they are displayed. We know of the location of taonga. Our parents told us to leave them there. So we have sound reasons for withholding information.

FCE would not interact with the agreed principles and we felt they gave no recognition of tangata whenua as people of value. So we decided not to talk anymore. FCE sought to open communication channels but we were not interested.

Reports came back to the hapu about surveyors undertaking seismic work, trucks arriving, pegs and ribbon on the ground. The hapu would collect up the pegs and pile them up. In the nighttime and in the daytime. It was reminiscent of Parihaka.⁶ The police were called and we were spoken to about vandalism and the interference with lawful activity. There was nothing covert about our activity; we co-operated with the police. Hapu members would put the detonating caps down the holes, took explosives and filled in the holes. FCE hired security companies to guard the operation. Greenpeace was also involved.

FCE has vastly superior resources to us and was able to complete the seismic [survey]. Hapu members were very angry and vengeful. The Daily News was not interested in our perspective. We looked for other ways to protest. The only viable option was the courts. But we had no lawyers, limited knowledge of the process (no clue), no resources. We had an out-of-date copy of the RMA, which was all gobbledegook to us. We didn't have a copier or computer so we made hand-written applications to the court. We also realised that FCE would win in court.

Before Pobokura A, the company had tried to establish a well in Tikorangi⁷ but the residents were able to evict them - they had money, knowledge and experience. We watched Tikorangi with interest and discussed it in daily hui.

FCE was living in a different world. The hapu was trying to find ways to deal with them. We felt helpless and angry. FCE wanted to establish a relationship and wondered why they got a cool reception. The company had to consult with the hapu. They chose the soft option and met with Otaraua Management Committee instead of us.

⁶ In the 1870s in order to stop land confiscations on the Waimate Plains south of Parihaka, Maori under the guidance of Te Whiti o Rongomai attempted to prevent the surveying of land by means including the uprooting of miles of survey pegs (Scott: 1975, 53-54).

⁷ Discussed in Case Study 5 in Chapter 6

It's run by the niece of the iwi liaison officer. We started filing objections to the resource consents to the Regional Council and District Council.

The project manager [at FCE] did a lot of the liaison but he was either not given good advice or didn't care. The decision to locate Pohokura A where it is was bizarre. Why would you site a well in an area where you can't throw a rock in any direction without hitting a significant site? You can tell that it was once densely populated because it has reefs along the beachfront where there is the closest concentration of seafood in the area. It was an area famous for its harakeke [flax plants]. It is easily defensible and has good waterways.

They planned to site the well on top of an urupa. Then they shifted it away but the overflow pipe for the stormwater was placed so it would have drained onto the urupa. There is a lack of understanding of what waste means to Maori. It is the most noa [free from tapu; non-sacred] of all matter. It is abhorrent.

The company was inept re site selection and culturally insensitive. We were aware that delays would be expensive and we were also aware that, although FCE was immune to cultural sensitivity, it was very sensitive to shareholder attitudes to their management. We looked for ways to motivate shareholders by costing the company money. We created delays by having our phones disconnected, not responding to messages or letters and not agreeing to meetings. We wanted to show the shareholders that the company was inept in a language they understood - money. We gained many adjournments in the Environment Court, lasting nine months. We needed time to prepare, time to respond; we found all the faults in the company's papers. We asked for a map on changes to the site location; it was unreadable so we got an adjournment. The judge began to smell a rat.

The FCE lawyer was totally insensitive. They approached the case from a scientific point of view and broad brushed the cultural stuff. Yet both of their Maori witnesses supported our case.

The company doesn't have a clue about Maoris. They wander into Maoridom unaware with no concept of the impact of their behaviour. They don't care. Corporate culture is the only valid culture. All else is irrelevant and inferior. They offered us money as an out of court settlement thinking we could be bought. The most valuable gain we made from the settlement was a signed agreement establishing a mutually beneficial relationship.

5.4 Summary

The social performance of the petrochemical industry has evolved over the last 20 years from a “handshake agreement” and bullying style of gaining access to land to formal lease arrangements;

from token at best relationships with tangata whenua to efforts to understand the position of Maori; and from communicating with communities “only when something is wanted” (for example, a resource consent) to a greater emphasis on building and maintaining relationships through using a range of communication tools. Communities have developed greater expectations of more respectful and consultative relationships.

However the tools for dealing with the complex dynamics of these groups are still largely PR-based and companies persist, in the main, in using unqualified social practitioners and ad hoc social management using the tools of negotiation-based (rather than education-based) consultation, communications and philanthropy.

Methanex was the only participating company that used an integrated approach to community relations involving planning, principles of social responsibility, a comprehensive and written policy, community involvement, and evaluation, all fundamentals of a CD approach. It is no surprise then that it gets good PR. It has no current issues with the community and enjoys a good company profile. Although Methanex is not dealing with the transience and pressure of E & P nor processing the same quantity of resource consents as FCE and STOS, it has repaired a legacy of ill-will generated at the time of the construction of the plants as evidenced in Case Study 2 (Chapter 5). Thus it is apparent that other companies operating in the region can improve on their social practices, the relative advantages of Methanex’s plant-based operation withstanding.

Sponsorship is used widely by all three companies and positively contributes to the local community. This is not a function of CD and is criticised for two reasons. Firstly it lacks transparency in that there are no public criteria typical of most public funding. This leaves it open to criticisms of inequitable access and targeting of more vocal or difficult groups in order to buy support. Secondly funding given to communities in a non-participatory way as described in the social investment model within CD, can result in further adverse social impacts. For example, sponsorship provided to an environment programme - while excellent in concept - was harshly criticised for not involving iwi in the planning (Anecdotal account from iwi member: 1999).

Despite efforts to build relationships and prevent resistance to company operations, significant opposition and distrust exists. The following chapter identifies three techniques central to a CD approach critical to building a post-PR framework for companies necessary to avoid the inevitable infrapolitical actions taken by disempowered groups when under threat, and to build inclusive, productive and respectful community relationships.

THREE KEY TOOLS OF COMMUNITY DEVELOPMENT - SOCIAL ASSESSMENT, PARTICIPATION & IWI CONSULTATION

6.1 Introduction

This chapter looks at three key features of the CD approach to impact management and community relations that this thesis maintains should be incorporated in the routine activities of E & P companies in order to address social impacts in a more strategic, comprehensive and responsible manner. Perceived threats of impacts from E & P activities, distrust engendered from previous negative associations with companies and anecdotal accounts of negative activity by companies elsewhere, and suspicion of PR practices and motives, require a new set of responses. Among these are social assessment as a planning and management tool, participation as a methodology for engaging and including communities in a meaningful way in planning for and management of impacts, and iwi consultation, acknowledging the need for a culturally explicit and derived approach to consultation. These three tools form part of an integrated framework developed in the following chapter.

SA is currently shunned by the industry in New Zealand. The reasons for this and the arguments for adopting SA are explored, and an SA model for the industry is proposed. Secondly the important developmental methodology of participation that is inherent in SA and other CD practices is reclaimed as a child of CD from its redefinition by industry as an economic tool. Thirdly, the elements of consultation as derived from the CD tradition in relation to tangata whenua are explored and a framework for consultation with iwi is proposed that incorporates both culturally relevant SA and participatory consultation.

6.2 Social Assessment

SA is synonymous with social impact assessment (SLA). Wolf (1997, 3) describes SA as:

... an interdisciplinary, interprofessional field of social science knowledge and application. Its aim is to provide means for protecting and enhancing the quality of life ... SIA practitioners seek to analyse and evaluate the conditions, causes, and consequences of social change on people where they live, in families and communities. The goal is to predict the social effects of a policy, program, or project while still in the planning stage, before those effects have occurred.

Burdge (1990s) describes SIA as 'the systematic appraisal of the impacts on the day-to-day quality of life of persons and communities whose environment is affected by development or policy change.' The process is seen to be predictive in its objective, as is Wolf's definition, but Burdge includes an applied function involving providing participants with 'a realistic appraisal of possible ramifications and suggestions for project alternatives and possible mitigation measures before the decision to go ahead is made.'

In addition to predictive and explanatory research functions, SIA generally is seen to be applied research involving, according to USGSA (1999):

... characterising the existing state of such aspects of the environment, forecasting how they may change if a given action or alternative is implemented, and developing means of mitigating changes that are likely to be adverse from the point of view of an affected population.

Wolf's (1997, 3) description of SA implies it has an ethical basis, 'to provide means for protecting and enhancing the quality of life' and a professional basis grounded in social science knowledge and methodology.

SIA practitioners must take professional and personal responsibility for their knowledge and the uses to which it is put. In addition, they must recognise and respect the integrity and dignity, of persons and groups who are the subjects of their studies. In the process, SIA can contribute to social development by means of endogenous capacity building and

the empowerment of peoples to control the forces of change, which may potentially affect them' (ibid).

Its distinctive substantive focus is that of "people impacts." Its methodological approach follows a general trend of rational problem solving found in numerous guises, such as systems analysis and decision analysis. In very practical terms SA can assist developers make better planning decisions and reduce secondary costs of development:

Social impact assessment gives developers a better understanding of "host communities" and their likely reactions to a development proposal. Instead of finding themselves ambushed by community opposition they did not anticipate, developers can manage their community relations without the friction and confusion that confrontation brings (Ministry of Works & Development: 1980s, 6).

6.2.1 The social assessment process

The process of social assessment according to Taylor et al. (1993, 69) includes:

- Early planning and identification of issues
- A sound information base
- Co-ordination between central, local and regional government and the developer
- Involvement of local people in decision-making and identification of issues
- Monitoring to assess the effects of the development over time.

A model of social assessment developed by Taylor et al (ibid) involves:

Scoping, a stage to identify likely issues, select key variables for analysis and make an initial description of likely areas of impact. Data is sought from some consultation and secondary research. *Profiling* is the second stage and involves undertaking a baseline study of the current and historical social context and trends, social characteristics of the area being assessed, social and cultural values, a description of the local and regional economy and the extent of local, central

and iwi authority influence. A plan is developed for assessing social effects, data sources and credibility of that data.

The *formulation of alternatives* is the third stage and involves consideration by assessors of development options, while the fourth stage involves *projection and estimation of effects* from the various considered alternatives. *Monitoring, mitigation and management* involves collection of information about effects, developing processes for mitigation and managing change, and monitoring the effects of intervention throughout the project duration. *Evaluation* completes the social assessment process and assesses the relevance, performance, efficiency and impact of the project against its stated objectives.

The Taylor et al model has relevance to the planning of smaller scale operations such as drilling and should occur in the E & P industry prior to site selection particularly when the company is intending to move into a new community. Because E & P activities are predicated on the geology of an area, a model for the industry would be more focused on identifying operations affected stakeholders, determining receptivity to drilling and educating them as to the likely impacts from the company's presence. An appropriate model would involve:

1. *Scoping*, used to gain a clear overview of the drilling plans and extent of the operation, and to determine the level of assessment required based on knowledge of the community.
2. *Profiling* by gathering secondary data and undertaking a survey of residents to:
 - Develop a database of those who live and work in the area (within a 1-2 kilometre radius of the proposed site/s) for ongoing communications purposes
 - Gain a profile of the community in terms of location of residents and user groups, demographics, community organisation, historical and cultural information relevant to the proposed site
 - Determine social trends and cultural and social activities in order to take into account in operational planning
 - Gain information on the economic base and infrastructure of the community
 - Understand people's attitudes and receptivity towards the company, and the rationale behind these attitudes.

3. *Site selection* would require consultation with tangata whenua, the landowner and residents as to the suitability or otherwise of the proposed site and discussions re alternative locations.
4. *Impact management* would involve: the development of a communication plan with the community identifying the best means of updating and informing parties during the drilling programme; educational workshops; the development of cultural plans with tangata whenua; the construction of a community calendar to plot key events in the area to ensure operations would not adversely affect them (for example a July wedding or the local gymkhana may not want helicopters flying overhead.) This stage would also involve compensation negotiation with the landowners, and a social investment strategy with hapu and the local community and service contracts for any activities undertaken by the community.
5. *Management of mitigation* would involve social practitioner liaison with the company, monitoring of plans and interventions and regular contact with the affected communities to ensure plans remain relevant, agreements are enacted and issues arising are swiftly addressed.
6. *Evaluation* completes the cycle, with stakeholders revisited to review the social assessment approaches taken.

6.2.2 Gender analysis

The incorporation of gender analysis into social assessment ensures the specific needs of women are addressed. Gender analysis acknowledges the qualitatively different interests and contribution of women in communities from that of men and seeks to ensure they are adequately represented in policy and plans. A gender approach means, according to Ostergaard (1992, 7) 'analysing the forms and the links that gender relations take and the links between them and other wider relations in society.'

The following case study illustrates how establishing knowledge of, and gaining participation from, a rural community may have prevented community resistance and opposition to a proposed well-site development.

Case Study No.5: Tikorangi

In 1998 Fletcher Challenge Energy withdrew an application for a resource consent to drill Mangahewa-3, a gas appraisal well in Tikorangi, North Taranaki after residents fought back. Residents were horrified that the company wanted to put the well-site only a kilometre or so from up to 30 residences, the local school, kindergarten, hall, church and sports clubs. Uncertainty was raised about the effect of flaring and drilling on animals, fear was expressed about the likelihood of a blow-out of the well, and criticisms made of the company's lack of communication (The Daily News: March 1998, 20).

If a social assessment had been undertaken prior to planning the drilling programme the company would have learned that a large number of residents were living there for lifestyle reasons, there was a strong sense of community and a strong belief in community participatory consultation. The community could have been engaged in developing options for a more acceptable location for the new well-site. It would have perhaps avoided the resistance that grew, fuelled by hugely erroneous beliefs about the likely impacts (danger, excessive noise etc) that were perpetuated by a few articulate anti-industry proponents, by introducing social learning techniques to dispel the myths and fears and educate the community about the realities of the industry.

6.2.3 Rapid appraisal methods

The second SA method considered here is rapid appraisal (RA). RA came about as an alternative to traditional social research in response to a need to speed up the information gathering process. Rapid appraisal according to Kumar (1993, pp21-27) was invented to grapple with the problem of 'gathering relevant information for agricultural and rural development initiatives with limited time and resources.'

Participatory rural appraisal (PRA) as popularised by Robert Chambers is 'a growing family of approaches and methods to enable local people to share, enhance and analyse their knowledge of life and conditions, and to plan, act, monitor and evaluate' (1997, 102). It has a greater focus on participation than RA, and less emphasis on the need to gather information quickly.

The three foundations or pillars of PRA (Mascarenhas: 1991 cited in Chambers: 1997, 104-5) are:

- the behaviour and attitudes of outsiders, who facilitate, not dominate
- the methods which shift the normal balance from closed to open, from individual to group, from verbal to visual, and from measuring to comparing; and
- partnership and sharing of information, experience, food and training between insiders and outsiders, and between organisations.

Both approaches involve a range of strategies, namely, key informant interviews, focus group interviews, community interviews, structured direct observation and informal surveys.

Adapted to the needs of E & P companies rapid appraisal could address key concerns of how to identify stakeholders relevant to the problem, how to deal with their values, and how to involve them in the process. 'The process starts with a tentative definition of the problem and then continues with stakeholder selection, discussion of the problem and the generation of alternatives in an interactive way' (IAIA Newsletter: Vol. 9, No 4, 1998).

PRA tools useful to engaging with site affected communities could involve the following, adapted from the ideas of Chambers (1997, 116-119):

- 'Handing over the stick' where communities can draw their own links between the activities of the exploration operations and the likely impacts on their community using local knowledge to determine the linkages
- 'Do it yourself' methods could be applied to local (particularly tangata whenua) environmental monitoring of well-sites, rigs, coastlines and water bodies

- 'Mapping and modelling' and 'time lines' to identify patterns of residence, historical and current cultural and social activities, and the location of wahi tapu
- 'Seasonal calendars' to visually identify key community events and routines, such as milking, school bus times, hui, sports meets etc and ensure these timetables do not conflict with drilling timetables
- 'Team contracts' to determine the agreements regarding agreed behavioural and meeting norms, MOU, communications plans and services (such as research or consultation) provided by the community to the company
- 'Participatory planning' to determine a social investment package, and to monitor and evaluate the relationship and agreements made with the company officials

6.2.4 Social Assessment - the poor cousin to EIA?

Taranaki companies prepare AEE but do not undertake social assessments despite the benefits that would accrue from doing so. There are a number of reasons for this. Firstly there is no legal requirement to produce a social assessment, unlike an AEE which is required under the RMA. The RMA is primarily concerned with natural environmental management issues, as are, generally, the regulatory authorities. While a resource consent is required to use land or discharge to air, a consent is not required to operate in human communities.

Secondly, there seems to be general lack of awareness of social assessment and how it can be of benefit to companies. Historically communities were less aware, less organised and less empowered in relation to E & P activities and companies so the ability to 'get on with people' was sufficient to gain access to land. This approach is no longer effective and companies are increasingly floundering around, moved into reactionary and hostile modes and inevitably ending up in court or paying out for excessive compensation and mitigation.

There is also a resistance to social science as it is regarded as somehow inferior to natural sciences. Dale et al (1999) refers to this as 'disciplinary chauvinism,' a marked disciplinary bias

against the social and even economic sciences. From examination of impact assessments of major developments in Australia, they noted that:

In the vast majority of cases, project teams are led by operators with physical science and project management backgrounds. Social impact and cultural heritage assessment practitioners are usually relegated to the role of sub-consultants.

Burdge and Opreyszik (1994) have shown that 'disciplinary chauvinism' can affect every aspect of impact assessment, thereby substantially constraining the quality of advice provided to decision-makers. Robinson (1995) suggests that, 'knowledge produced by social scientists is regarded by people schooled in physical sciences as fuzzy and imprecise, not predictive. Consequently it is assumed to be subjective (as opposed to objective) and more readily subject to bias.' Ravetz (in Robinson: 1995) questions an assumption by natural scientists that 'Science can be useful for policy if and only if it can provide the "facts" unequivocally.' Given the uncertainties of oil and gas exploration, it would appear that the physical sciences could be similarly regarded as lacking predictive precision and empirical objectivity.

Fourthly, there seems to be a reluctance to incorporate social science knowledge into policies and plans and this may play a part in the absence of social assessment procedures. From the author's experience working in an E & P company the terms 'social' or 'community development' used in terms of the company's community relations function was often translated into 'social service' and viewed as an activity incongruous to a commercial environment. A similar frustration was borne by Burton (1995, 133), who writes, '... I have found the single greatest impediment to improving matters lies in a simple ignorance among managers that a better way exists.' The challenge then is to effectively communicate that better way to such managers.

There is currently a trend within the impact assessment profession to integrate SIA and ELA. 'In the formative years of environmental assessment,' according to Bryan (1999, 3) 'the tendency was to ignore social assessment altogether, or to substitute public involvement (really public relations ...) or some kind of economic analysis for a more encompassing social analysis.' He notes that past segmentation of the two practices assumes:

the 'environment' and humans are really separate realms. Thus we have 'environmental effects' and 'social effects.' It follows that biophysical scientists will work together to ascertain the former and social scientists will work together to ascertain the latter.

Bryan argues that an integrated approach implies that environmental effects have social outcomes and 'in fact, any environmental policy is de facto social policy.' Humans affect the environment and this affects humans.

Clearly the profile of social assessment needs to be raised and integral to environmental assessment in a more rigorous form than that evidenced in current practice.

6.3 Participation and Empowerment

'Participation is a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them' (World Bank: 1998, 1). According to Slocum et al. (1995, 5) participation is also:

... a process of empowerment that can help to amplify traditionally unacknowledged voices. It can strengthen the confidence of all members of a group in the knowledge and capacity of each and may foster the ability to question and contribute to both local and international systems of knowledge. This form of participation implies constant readjustment and on-going information exchange, discussion, and conflict management or resolution under complex, changing and highly uncertain conditions. It involves consciousness-raising and knitting together a shared understanding of problems and a vision for the future that leads to commitment and ownership by the community.

Participation strategies are used to empower and engage affected communities in developing acceptable and useful communication and development processes. These processes should include for the E & P industry: education, compensation, impact mitigation, information, social and service contracts, cultural plans, environmental monitoring and social investment programmes. The essential elements of participation are collaboration and partnership in planning and decision-making, which require expert facilitation. Participation is not consultation,

usurpation as an economic tool has created a tool of control. Participation has become, according to Rahmena (1992, 120):

... disembedded from the socio-cultural roots which have always kept it alive. It is now simply perceived, as one of the many 'resources' needed to keep the *economy* alive. To participate is thus reduced to the act of partaking in the objectives of the economy and the societal arrangements attached to it.

Rocheleau (in Slocum et al: 1995, 3) warns also that participation 'can be a wolf in sheep's clothing – a vehicle for a new form of manipulation or intervention'. This is very different from participation as a means of sharing control over an initiative. Jules Pretty identifies seven levels of participation (see Table 6 below). The first five are consistent with a PR approach. Manipulative participation could be seen in the community advisory group/panel model of FCE and Methanex in that little or no decision-making power is given to the communities. Non-notified resource consents and announcements regarding intended drilling programmes are examples of passive participation. Functional participation, and to some extent participation by consultation, is indicative of the consultation process used for obtaining resource consents. Interactive participation and self-mobilisation are firmly grounded in CD.

Table 6: Pretty's Typology of Participation

Typology	Characteristics of each type
Manipulative participation	Participation is simply a pretence: "peoples" representatives on official boards, but they are unelected and have no power
Passive participation	People participate by being told what has been decided or has already happened: involves unilateral announcements by project management without any listening to people's responses; information shared belongs to external professionals
Participation by consultation	People participate by being consulted or by answering questions: external agents define problems and information-gathering processes, and so control analysis; process does not concede any share in decision-making; professionals under no obligation to account for people's views
Participation for material incentives	People participate by contributing resources (eg, labour) in return for food, cash or other material incentives: farmers may provide fields and labour but are not involved in testing or the process of learning; this is commonly called participation, yet people have no stake in prolonging technologies or practices when the incentives end
Functional participation	Participation is seen by external agencies as a means to achieve project goals, especially reduced costs: people may participate by forming groups to meet project objectives; involvement may be interactive and involve shared decision-making, but tends to arise only after major decisions have already been made by external agents; at worst, local people may still only be co-opted to serve external goals
Interactive participation	People participate in joint analysis, development of action plans and strengthening of local institutions: participation is seen as a right, not just the means to achieve project goals; the process involves inter-disciplinary methodologies that seek multiple perspectives and use systemic and structured learning processes. As groups take control of local decisions and determine how available resources are used, so they have a stake in maintaining structures and practices
Self-mobilisation	People participate by taking initiatives independently of external institutions to change systems: they develop contacts with external institutions for resources and technical advice they need, but retain control over resource use: self-mobilisation can spread if governments and NGOs provide an enabling framework of support. Self-mobilisation may or may not challenge existing distributions of wealth or power.

(Source – Mowforth & Munt: 1998, 241)

Companies using participation and empowerment strategies can minimise the conflict and resistance that arise as a result of unbalanced power dynamics in a relationship. The following case study is an example of how a fairly innocuous environmental activity, disposal of drilling sands, was perceived as a major environmental threat because of suspicions and doubt of the company's motives. It shows how infrapolitics determined an unsatisfactory outcome for the company.

Case Study No. 6: Drilling sand disposal

When FCE liaison staff needed to gain a consent to dispose of produced sand from drilling they sought approval from tangata whenua through meeting with three hapu organisations who had interests in the land area where it was proposed to dispose of the oily sand. Several options for disposal were drawn up and these were presented to the hapu with a recommendation to spread it over the ground where it would be degraded and returned to soil. This was considered to be the most environmentally sound option and the team was confident the hapu would adopt this recommendation.

Staff met with the hapu, explained the options and invited them to consider them. Additional information including research on bio-remediation was supplied. What should have been a fairly straightforward process turned sour with only one of the hapu giving approval. One hapu did not give approval and the other abstained from giving approval until the objecting hapu gave theirs. After several frustrating months and no consent the company eventually disposed of the sand to a private licensed landfill.

The approach taken is typical of a PR approach to consultation; while the intent of the company was good, that is to engage the hapu in decision-making, the process was not empowering. The dissenting hapu appeared suspicious of the company's intentions and recommendations, and sought to gain power through delaying decisions and withholding support and insisting on researching the options – through site visits and information requests – in far greater depth than was reasonably required.

A facilitated participatory approach with the aim of joint problem solving would probably have produced a more satisfactory outcome. Under a participatory style the initial stage would have been exploratory and educational aimed at empowering the hapu to make decisions based on a full understanding of the problem – that is, what to do with a drilling waste by-product. Complex information was difficult to convey in an understandable way and this appeared to have created suspicion and resistance. Hapu members reflected that the process was simply designed to gain consent approval. Interestingly the one hapu organisation who gave written approval to spread the sand did so on the basis of prior knowledge of the industry.

The second stage would involve generating options to address the problem. The company would have been open to the possibility of other options and supported the process of researching these. The options explored by FCE and presented to the group would be contributions to the

option generating process, but not presented as the only possible options. The effect of presenting a closed set of options is that the consulted party received a message that regardless of their opinion, the company would do what it wanted to do. While the company believed it was providing an opportunity for participation in decision-making it was in fact presenting a fait accompli. This perceived slight by the hapu resulted in a lengthy debate over the options in an attempt to acquire power and 'make the company work' for their approval because 'we don't like being told what to do and what to think' (Anonymous account from a hapu member: 1998).

A significant factor identified by the team (including the author) was the underestimation by the company of the seriousness of the hapu's interest in the environmental impacts of sand dumping and the weight of responsibility on hapu representatives to make decisions that would impact not only on the wider hapu but also on future generations. Therefore the need for full and comprehensive information was deemed imperative. A request to monitor the bio-remediation programme, which was trifling to the liaison team, was made to ensure that the mana of the hapu representatives would not be diminished by agreeing to an activity that could be environmentally detrimental. The company lacked a full appreciation and understanding of the concept of kaitiakitanga (Personal account, observations and anecdotal information from FCE staff: 1998).

6.4 Consultation with Tangata Whenua

Case Study 6 provides us with an appropriate point at which to explore a third key feature of the CD approach considered in this chapter – consultation with indigenous groups.

Consultation and negotiation with indigenous groups requires an acknowledgement that their value systems and worldview are fundamentally different from those of the company. In the New Zealand context, for E & P companies to have anything resembling a meaningful relationship with Maori, knowledge of and empathy for things Maori are fundamental prerequisites. To not know about cultural processes is a slight and the cause of miscommunication. It cannot be compromised with the lack of professionalism inherent in 'common-sense' or the 'teach me, I'm new to this' approaches.

Maori perceive themselves to be 'an integral part of nature and are expected to relate to it in a responsible and meaningful way' (Walker: 1982, 69). From observation, many pakeha, unfamiliar with the Maori world, view it firstly with interest and then with irritation. Maori processes are often seen to be slow, their rituals irrational and their iconoclastic behaviour is regarded as disrespectful of the prevailing norms of the non-Maori world. Non-Maori do not necessarily understand that the history of colonisation has created persona of difference that is the result of psychological damage not cultural difference, nor do they understand why Maori hold on to past cultural practices that seem out of place in the modern day. They often cannot understand how Maori can have white skin yet not identify as pakeha. They are threatened and often hostile. They try to understand Maori from a non-Maori frame of reference. They translate complex terms like mana and tapu into simple terms like "authority" and "sacred" and say they understand what it means and decide that authority and sacredness are unimportant because in the pakeha sense they have become unimportant.

Important pakeha can think they are important in the Maori world because they have 'mana' in their workplace, not realising that this monoculturalism makes them tantamount to children in the Maori world. Paradoxically if they knew enough to know this, they might achieve a degree of mana.

In the Maori world it was believed that:

Vandalism and wanton use of resources created an aitua (evil omen) which would bring supernatural disaster on the perpetrator. When a rahui (prohibition) was placed on a forest or fishing ground it was backed by the spiritual power of tapu. Since the punishment for non-observance of a rahui was meted out by demons of the spirit world, few people dared to tempt fate. There was certainly no need for a temporal enforcement agent (Walker: 1982, 71).

Maori generally hold a perception of land that is often at odds with those involved with land-based economic activity. All land historically used or occupied by Maori, including mountains, waterways, forests and the coastline are regarded as taonga, or possessions of immeasurable

value. These taonga are believed to be born of gods from whom Maori people are descended. Many Maori will therefore regard *all* land as wahi tapu.

Wahi tapu are generally regarded as specific sites, for example, an urupa, the site of a now defunct pa or house, land where someone has died or where afterbirth is buried. A wahi tapu may be a place where a significant historical meeting took place or it may be a rock or island that is described in legend. Wahi tapu can mean different things to different people. If wahi tapu are not respected it is often believed that the ancestors may punish by creating problems, ill health or death.

The earth is personified in Maoridom as Papatuanuku. When it becomes necessary to use land to build on, cultivate or drill for oil, permission is asked of Papatuanuku through prayer.

By understanding the rudiments of Maori spiritual beliefs and cultural practice, and accepting their validity to Maori, companies needing to utilise land and waterways can then determine how best to proceed with building relationships with Maori. Best practice is not to counter these beliefs but to accommodate them (Anecdotal accounts from kaumatua).

The following case study highlights how three hapu in South Taranaki feel about their environment and shows how resistance developed to the company operating on their traditional lands intensified because they did not trust the company to regard the environment with the same depth of feeling held by Maori.

Case Study No. 7: Ngarewa

Shell Todd Oil Services (STOS) is proposing to establish a well-site north of Okaiawa in south Taranaki, called Ngarewa. The site is on privately owned land and agreement has been reached with the landowner to lease it. The proposed well-site is 2.5 km from Kanihi marae, 450 metres from an urupa and 200 metres from Inaha Stream. Applications for resource consents are to discharge stormwater, and to discharge emissions to air from the flaring of gas. Seventeen submissions were received in opposition to both applications from members and representatives of three hapu Inuawai/Okahu, Umutahi and Ngatimanuhiakai.

A joint committee representing the three hapu stated in its submission to the Environment Court pre-hearing committee, that: *'We have an absolute right to retain and control what little remains from the massive land confiscations of the past'* (Ngarewa Wahi Tapu Komiti: 1999). This statement reflects the sentiments of tribal Maori throughout Taranaki, who continue to suffer the effects of land confiscations in the 19th century, and are extremely guarded towards any real or perceived erosion of their land interests. Understanding the depth of this sentiment is critical to understanding the position of Maori in relation to mining companies.

The issues raised in submissions by the hapu and individual members are summarised as follows:

- Lack of understanding of cultural and tangata whenua issues
- Lack of consultation with tangata whenua and inadequate time frames to undertake full and open consultation
- Actual and potential risks related to people and health, cultural safety, land safety, water safety and air safety
- Cultural pollution of the river, air and land. Contamination of vegetation and fish life
- Inconsistencies between the RMA, regional policy statements and regional plans regarding tangata whenua issues and conflicts between planning documents of iwi and regional policy
- Failure by the Taranaki Regional Council to meet its obligations under the Treaty of Waitangi and its principles of partnership, shared decision-making, equal power relationship, reciprocity, the right of Maori to authority over their lands and other taonga, protection of cultural values, taonga, tikanga, mauri, kaitiaki and confidentiality
- Visual impacts
- Effect of drainage on known wahi tapu
- Lack of understanding of the Maori perspective or worldview of water and conflict with Maori beliefs
- Environmental impact on the tupuna whenua, and the effect on Papatuanuku
- Misleading information re wahi tapu
- Disrespect for social, cultural economic concerns
- Drawing and drying up of natural spring water.

Requests were made for tangata whenua representation on the Taranaki Regional Council and Stratford District Council consent hearing panels, the right to request hearings to be held on marae, the right to have whanau/hapu affected by the application to submit and have their say,

the right to give verbal presentations in Maori, and to nominate who has access to sensitive information.

STOS felt that they had acted appropriately and had undertaken consultation in a manner acceptable to the iwi and hapu. They met on marae, provided information and gave assistance to a marae development project. They felt the process had been undermined by the arrival of a hapu member from out of the area who had stirred issues up and led resistance against the company.

The hapu claimed communication was inadequate, the company had made an assumption that they could come on to the land without tangata whenua approval, there was a lack of research of the hapu's position, little understanding of the way the marae functions, and that the company had determined and imposed the time frame for consultation. The hapu was outraged that the company undertook surveys of land using a ground penetrating radar to provide 'evidence' of no wahi tapu on the land. They asked (in their submission to the Council):

How can the laser detect the spiritual essence of an area?

How can the laser detect the birth of our tipuna?

How can it detect the whanau whenua [placenta] buried there?

How can it detect the battle wounds, and the blood spilt?

It did not detect the gardens and the orchards that were planted and tended

How can it detect the pain and joys of people – from the past and present? (Brookes: 1999, 12).

From a CD perspective the submissions made by the hapu were well constructed, well argued and consistent with issues raised by tangata whenua in dealings in other industries. It was clear that the company and its agent were not au fait with Maori values and process.

The submissions raised a number of erroneous beliefs about the physical effects of drilling on the environment which suggests that social learning had not taken place and the hapu had little faith in the integrity of the company because of its lack of understanding of Maori values and process.

The company was using a PR approach – supplying information, minimal compliance consultation, making donations. The community relations process was undertaken by engineers and physical scientists. There was no evidence of participatory planning or account taken of the principles of the Treaty of Waitangi, which have come to represent bottom-line expectations of Maori in consulting with industrial developers. The company does not seem to be aware of the change in emphasis in environmental planning since the RMA. The situation whereby developers

(including the government) directed economic activity and made the trade-offs in the interest of wise uses has become one whereby 'the Government has moved to underscore the shift in focus from planning for activities to regulating their effects...the focus is now on externalities – the effects of activities on the receiving environment ...' (Upton in Fookes: mid-1990s, 1).

In effect the hapu in this case was guiding the company in appropriate consultation processes.

6.5 Summary

This chapter has explored three core components of the CD approach. SA as a research and participatory planning tool, the concepts of participation and empowerment, and iwi consultation.

Inherent in all three is a need for practitioners to learn about and understand community stakeholders in order to account for the socio-cultural framework that determines their modus operandi, concerns, beliefs and interests as the basis for building respectful and productive relationships. These components are contained within a broader model outlined in the next chapter.

A MODEL FOR SOCIAL INTERVENTION

7.1 Introduction

This chapter brings together the key social principles and strategies for E & P companies considered in the preceding chapters to create an integrated CD model for the industry.

Companies bear considerable costs as a result of not undertaking systematic appraisals of social impacts and not planning for their management, and in the process do irreparable damage to their public image and to the public. Ad hoc “common sense” approaches undertaken by those unprepared and untrained in working with communities will continue to produce the hit-and-miss outcomes described in case studies in Chapters 4-6. Communities may well respond favourably to a friendly engineer or physical scientist who blunders around in the social science realm but more often these people create ‘mystifying’ adversarial relationships and solid impasses.

It is the contention of this thesis that there is nothing mystifying about the negativism engendered in communities who are ignored, bullied, and whose interests are marginalised in the economic pursuits of powerful companies. Moreover the relationship between communities as natural resource owners and caretakers, and companies, ought to be and can well be mutually interdependent and mutually beneficial. As Labonne (1995, 111) points out:

Communities have much to offer to corporations: a workforce; local knowledge of the environment, climate, wildlife, and land management; and the capacity to offer a wide range of support services. Corporations on the other hand are a vital source of financial and technological resources and equipment. They provide employment opportunities and

the promise of spin-off business opportunities and possibilities for processing and other related industries.

7.2 An Integrated Practice Model

This thesis proposes that the following comprise essential components of a CD model for the petrochemical industry:

1. Adoption of a community-friendly policy environment
2. Engaging appropriate practitioners
3. Undertaking social assessment prior to and during the project life cycle
4. Use of participation strategies
5. A programme for iwi relations
6. The use of communication plans, cultural plans, and MOU
7. Provision of sustainable investment programmes
8. Evaluation of social intervention strategies.

7.2.1 Adoption of a community-friendly policy environment

‘The adoption of an environmental policy is almost standard practice for major corporations, whereas very few companies have an explicit social policy’ (McPhail & Davy: 1998, 11).

The ability of community relations staff or consultants is inhibited or enhanced by the policy – or absence of – that provides a mandate to enact social processes and programmes of enduring benefit to the community and the company. Top-level endorsement of a CD approach supported by strong internal communications is critical to success as it paves the way for the creation of a company culture that makes the interests of communities a priority of the company. In health and safety parlance this is referred to as “visible management commitment”.

Social policy develops a position for the company that is both binding and transparent; the community is clear as to what it can expect from the company, while the company is clear as to what it must deliver on. A social policy might allude to the principles of:

- Responsibility – to protect the social and physical environment
- Acknowledgement – of the community as affected, interested and credible participants in, and valuable partners to, the E & P industry
- Respect – for the values, lifestyles, concerns and priorities of communities
- Participation – as a right of communities to be involved in decisions and actions that affect them and future generations culturally, socially or economically
- Contribution – to compensate for loss, to pay for services and resources, and invest in the communities in a way that addresses the distress and disruption engendered
- Recognition – of the relationship of Maori and their culture and traditions with their ancestral lands, water sites, wahi tapu and other taonga, and the principles of the Treaty of Waitangi, namely, the obligation of the crown to protect Maori interests, tribal self-regulation, partnership and active protection
- Confidentiality – of information supplied by communities and held by the company
- Transparency – in terms of the social methodology of the company and being up front about the extent of compensation and benefits that will be made available in order to engender fairness and non-discrimination in dealings, and avoid claims of manipulation.

Intrinsic to a position or statement of principles are ethical and philosophic considerations, which should acknowledge the powerlessness of the community relative to that of the company; the often vulnerable status of indigenous groups; social and environmental sustainability; and accountability.

According to New Plymouth District Council (1996, 18) policy pertaining to iwi relations should allude to principles that:

- Acknowledge the status of tangata whenua as kaitiaki and as having manawhenua (traditional authority) over ancestral lands
- Afford genuine consideration to the advice and concerns of tangata whenua with an open mind
- Acknowledge the possible resource barriers to Maori participation and meet reasonable costs associated with securing input on specific wahi tapu and consultative services
- Observe tikanga and kawa, (rules and cultural protocols) specific to each iwi when participating in a Maori forum
- Take into account the Treaty principles
- Afford sufficient time and opportunity, and supply sufficient information to enable participation in a meaningful way into planning and consultation.

The World Bank notes that ‘training and experience required to implement such policies are typically in short supply in corporations, and developing capacity should be a priority. There is also a need to develop awareness and understanding of the value of enhancing social capital, both to companies and communities’ (McPhail & Davy: 1998, xi).

7.2.2 Engaging appropriate practitioners

Deploying engineers and geophysicists should not be considered an appropriate substitution for engaging CD practitioners who have both a theoretical framework to guide practice and the research, facilitation, training, conflict management, and cultural communication skills required. These people must be able to ascertain and articulate both the interests of the community and those of the company, and other parties.

There must be an explicit acceptance by the company of the professionalism required to manage stakeholder relations. Burton (1995, 133) articulates below the frustration of social practitioners whose knowledge is diminished by mining companies to that of an ‘interest in people’:

I find it incredibly tiring to have to argue about social issues with those with a very thin background in social science. I don't believe I argue with geologists and engineers about the validity of *their* data. I am happy to explain my points from first principles with anyone but when the conclusions do not support current practices, it is frustrating for the discussion to be determined as being "too academic". You would not, I think, catch geologists being "too academic" about epithermal gold deposits or copper-porphyry formations. Human beings and human societies are necessarily hard to understand.

Development practice is an 'art rather than a science' according to Kaplan (1996, 106) and one that is subtle and sensitive:

It lies primarily in interventions which leave people better able to take control of their own life circumstances. It demands the highest form of consciousness, for it involves the balance of the polarities of intervention into people's lives on the one hand, and respect for the integrity and freedom of these same people on the other hand. Indeed interventions for the sake of that freedom; assuming responsibility for others in a manner which leaves people capable of acting for themselves.

The development practitioner must be able to diagnose contexts and respond appropriately yet is 'involved primarily, not with product delivery, but with process facilitation' (ibid, 119-120).

The subtlety required in development practice described by Kaplan is inherent in a style that seeks to manage human interactions with the utmost integrity and respect yet with skills to manage creative tension while simultaneously confronting and supporting, challenging and nurturing, without patronising or assuming (ibid, 107). Observations, objective and conscious analysis, active listening and the capacity to withhold one's will in a given situation are key activities of development facilitation, and that is before any programme implementation. These skills are acquired, believes Kaplan, through rigorous self-reflection enabling practitioners to identify how they project themselves on to the community.

Staff involved with communities will need to have an exposure to and understanding of Maori values and processes and an appreciation of the historical development of Maori that determines much of the contemporary position of Maoridom.

Social practitioners appointed to manage iwi relations must be bicultural, ideally Maori, with appropriate social science/CD skills.

7.2.3 Integrated social and environmental assessment

Undertaking routine SA as outlined in Chapter 6, including gender analysis, alongside environmental assessments should be regarded as pivotal to external relations with affected communities for the process encapsulates a full range of applied social science methodologies including, facilitation, participation, research and communications.

SA is then not only a tool for identifying players and their issues, predicting events and planning for the management of impacts. It also involves facilitating a consultative process through each stage of a development programme, and subsequent programmes, to maintain the relevance of social intervention strategies.

Integration of environmental and social assessment acknowledges the inextricable nature of social and physical environments. This understanding represents a maturity of thinking about the nature of industrial impacts. Acceptance is also required that in some situations the social impacts of projects would be so profound that avoidance is the only acceptable form of mitigation (Phail & Davy: 1998, 20).

7.2.4 Participation and empowerment

Participation strategies are used to empower and engage affected communities in developing acceptable and useful communication and development processes that are acceptable to both the company and the community as explained in depth in Chapter 6. Companies must be prepared to listen, to educate and to build capacity, in order to enable meaningful participation to take place.

The processes and the philosophy of participation should be integral to the companies plans and processes regarding communication, community education about the company and its activities, site selection, resource consent consultation, work programme planning, social investment programmes, environmental and safety considerations of the company, environmental policy, and any other forum or process involving impact management.

7.2.5 A programme for iwi relations

A company policy on iwi relations is the starting point for practice as it provides a mandate to undertake culturally relevant professional consultation with tangata whenua. This policy should be based on an acknowledgement of the distinct social and cultural identity of Maori and the contribution to conservation based on traditional knowledge systems and the principles of the Treaty. It should be participatory and could involve sustainable social investment and commercially based remuneration for services provided.

O'Faircheallaigh (1996, 2) cautions that indigenous people have often been excluded from social assessment of projects affecting them 'or have faced major financial and cultural barriers in participating effectively and in having their perspectives accepted as legitimate' and thus have been unable to 'shape the outcomes of development projects in ways that favour their interests.' The New Plymouth District Council (1993, 19) has confirmed this contention noting:

The iwi and hapu of the district are very much under resourced. As groups called on to actively participate in an increasing range of consultative initiatives ... they typically lack finance and skilled personnel ... factors which inhibit the ability of tangata whenua to participate on an equal footing ...

SA processes should be used to identify, through both primary and secondary research, who the iwi, hapu and whanau are who live in, and outside of the area, the nature of tribal organisation and authority, tribal boundaries and boundary disputes, location of marae and Maori residents in relation to the land. It should also identify current priority issues for tangata whenua, activities and unearth relevant Maori history.

This process of research would begin to build relationships with the Maori community and insights could be gained into the attitudes Maori have to the company's activities. It could also determine who within the hapu, iwi or whanau has the mandate to consult with the company. Iwi decision-making is either consensual or democratic and an individual seldom has the mandate to act on its behalf. Decisions and advice from tangata whenua are binding if they are issued from all members, or an elected or otherwise mandated body representing the members.

Non-consent related consultation, the purpose of which is simply to build a relationship with the community, will form the basis of future communications and consultation for consents. It will:

- Involve the company providing education and training as required about the operational aspects of the industry, consents and legal framework
- Identify a process for consultation – who, how, when, why, where – that is agreeable to both parties
- Identify the role Maori will play in operations – for example, in reviewing AEE, monitoring environmental affects, social and environmental planning and in research on wahi tapu
- Determine what benefits hapu will accrue through the social investment, that is, sustainable social, environmental, economic, or cultural programmes that the company will invest in. It will determine what remuneration will be provided, and develop service contracts where appropriate
- Involve the development of a Memorandum of Understanding (MOU) or relationship agreement that ensures clarity about the mutual positions reached. A MOU developed with each hapu, can establish a basis for an ongoing relationship and specifies an agreed process for consultation. The MOU identifies hapu boundaries, those who will be consulted with, and how this will be done. Given the difficulty of engaging a large membership, many of who may not live locally, a MOU can be a valuable tool to avoid the replication of negotiating broad agreements.

Consent-related consultation should take place in all cases where a consent is required, regardless of whether this is required by the regulatory authority. (A courtesy call might be sufficient and

appropriate). It should not be assumed that regulatory authorities can determine whether Maori will be affected by an activity. This should proceed in a manner agreed to in the consultation process plan unless circumstances warrant a change. A participatory approach and provision of complete and accurate information and education is required. Participation of tangata whenua in site selection, operations planning and monitoring are valuable ways in which the company can both prevent marginalisation of tangata whenua and mitigate resistance to operations.

7.2.6 Community planning tools

Planning tools are useful in formalising relationships and agreements made with communities. A MOU, or relationship agreement, is the tangible outcome of a process whereby the company and the community group gain clarification of the understanding of the principles, practices and expectations of each party mutually agreed to for the period of their relationship. While not static documents, they are intended to be binding and to be enduring.

Cultural plans acknowledge and afford Maori the respect and dignity befitting their status as tangata whenua and enables the unfettered expression of cultural values in the manner in which they choose to protect their environment. A cultural plan encapsulating agreements and protocols in relation to Maori cultural and environmental concerns and interests should cover:

- Payment of expenses incurred in the development of the plan and in identifying cultural sites
- Procedures for the discovery of wahi tapu, koiwi (bones) and taonga
- Establishment of a fund for the purpose of assisting iwi identify and uplift taonga
- Demarcation of culturally important sites
- Responsibility for contacting Maori representatives in the event of a cultural find
- A process for undertaking environmental monitoring of site operations

(Ministry for the Environment: 1991, 6).

Service contracts are contracts for the operations-affected communities to supply services to the company that will be paid for in some agreed form. This acknowledges the commercial value of community input and the constraint of community resources. A business relationship is more empowering to the community than a voluntary/philanthropic relationship, and also to the company who can as the customer, establish the terms for the work to be undertaken. The types

of services appropriate for this arrangement might be work contracts for land rehabilitation and other site-based work, undertaking consultation with iwi and hapu, historical or other research, organising and/or catering for meetings and hui and information distribution. Provision of non-competitive tenders is a way in which the company can invest in the community.

7.2.7 Social investment programmes

Investment programmes under the CD approach are sustainable contributions to the social, cultural or economic development of operations affected communities factored into project planning. The notion of “investment” refers to the provision of benefits to communities. The “social” component renders that giving is based on principles of contribution, responsibility and sustainability and is participatory in approach.

Social investment is a transparent (that is, publicised) programme by which the operations-affected community is invited early in the consultation phase to consider ways in which the company may, at any stage, make an investment in their community. This investment is not sponsorship, nor a donation but a reciprocity-based contribution. It acknowledges the time and effort given to the consultation process, along with the inconvenience, disruption, loss and personal expense incurred and experienced by operations affected communities. It is an acknowledgement by the company of the value it places on community input, collaboration and support that enables E & P activities to take place.

The features of social investment should be that the project or projects to be supported are (a) for the community (or hapu) not for individuals; (b) the project must be enduring and sustainable, that is make a fundamental long-term improvement to the community; (c) the nature of it is determined largely by the community; and (d) it involves establishment costs as opposed to ongoing support. The company would determine the level of contribution (and the basis for ascertaining that level) and enforce the above criteria. Examples of social investment programmes may be a capital works project such as a school building, water treatment facility, marae extension; a capacity building exercise, for example, training; provision of administrative equipment; a heritage or environmental protection project; employment or service contracts; or start-up funds for an economic development project. It may be provided in conjunction with

other community resources, for example with a local council, or draw on central government funding programmes, and involve cash and/or in-kind payments.

7.2.8 Social evaluation

Evaluation or auditing of social performance provides a gauge for a company to determine its effectiveness in mitigating and managing impacts, managing community relations and the intervention strategies applied: 'This information is useful to management. Auditing is important for understanding and managing liability. Bad relations with the community will hurt ... There is a very pragmatic value to social performance data' (Nelder: 1998).

There are a number of approaches that could be applied to social evaluation in the petrochemical industry. One would be to revisit respondents surveyed during the social assessment to compare changes in the baseline data. This would be useful in updating the knowledge of the community. Well-constructed external attitudinal surveys gauging perceptions of the company's performance can be indicative and useful.

A more comprehensive and valuable approach however may be to establish social indicators with which to measure a range of relevant conditions. Social indicators act as surrogates for states and characteristics that may not be directly measurable, for example, satisfaction, operationalising abstract concepts in order to measure social well-being.

Social indicators may be external-objective as in level of income, or internal-subjective, such as satisfaction with services. They need to be policy relevant, measurable, reliable and easy to understand. Davey (1998) cautions that care must be taken in the use of indicators:

Firstly there is a danger of implying causation when this cannot be proved ... Secondly, value judgements underlie the selection of indicators. ... Thirdly changes in society highlighted through the use of indicators cannot be assumed to be the direct result of policies ...' and, 'A fourth warning concerns using social indicators to extrapolate trends into the future.

Examples of indicators for measuring social performance in E & P companies whereby the goal may be to achieve mutually beneficial and positive relationships, might include: Participation level or accord reached; the number of MOU and service contracts in place; the number of complaints lodged, and complaints resolved; community satisfaction with the company's social intervention strategies; community awareness and knowledge of industry practices; co-operation; resource consent approvals gained: and leases negotiated. Participation, for example, might be measured by numbers of meetings agreed to and attended and numbers in attendance, although this could be a measure of extreme dissatisfaction if participation is high or conversely, extreme satisfaction if communities see no need to participate. Community satisfaction could be measured by time variable surveys, for example at the operational stages⁸, extracting changes in the level of satisfaction and identifying correlating phenomena.

7.3 Conclusion

This chapter has identified a range of core strategies that collectively contribute to the development of a post-PR model for community relations for E & P companies. It is a model that draws from a rich pool of development theory and practice and is both productive and predictive.

Investment by a company in the application of this model will predictably bring a range of returns –both social and economic. These include: ease of dealing with affected communities, strong relationships with key stakeholder groups, a social licence to operate, clear company guidelines and processes for engaging with communities, data from which to assist in future planning, a means to measure and thus improve on social performance, more expedient means of consultation and securing resource consents, more highly targeted and thus effective communications and, ironically, better PR than can be achieved from a PR approach.

⁸ As identified in Table 3: Labonne's Five Stages of Mineral Mining, in Chapter 3.

CONCLUSION: A ROLE FOR CORPORATES IN SOCIAL POLICY AND DEVELOPMENT

*Knowledge without ethics is not so
much bad ethics as inferior knowledge*
(Ashis Nandy: 1983)

8.1 Introduction

The petroleum industry is the biggest business in the world. With daily worldwide consumption amounting to more than 75 million barrels of oil, oil generates a \$2 to \$5 trillion industry. This is equivalent to the entire US economy and that is only oil consumption. Gas figures are comparable (Economides & Oligney: 1999, 75).

This industry, like no other, impacts powerfully on the global economy, the environment, political stability and the poverty and wealth of nations. It is often the ringleader in wars and in environmental degradation. It has generated dependency in nation states as suppliers of petroleum products, and in industrial and domestic consumers, whose energy consumption is 90% hydrocarbon based (ibid, 78).

Given the enormous influence the industry has on the lives of people, consideration must be made, and is, to the nature of social and environmental impacts, how they are manifest in different environments and how they are managed at global, national and local levels. Who takes responsibility for these processes is fundamental to these considerations.

It is insufficient to lay the responsibility entirely on host countries, simply because they do not always have the capacity to act. Even in developed countries such as New Zealand, where there

is good guiding legislation in the RMA and some protection of indigenous rights in the Treaty of Waitangi, monitoring resources are inadequate to ensure the provisions of these are enforced, and that resources are managed prudently at all times.

It is also insufficient to lay responsibility in the hands of the affected communities. The commitment and capacity of communities is often insufficient to effect meaningful action to defend their interests and in some cases, ensure their survival.

Increasingly NGOs are taking up the cause of indigenous peoples and disenfranchised communities and collaborating with corporates to manage the politics of these vested group interests. NGOs are asserting, and it has been the contention of this thesis, that the companies themselves need to take greater responsibility for the impacts of their business, both upstream and down.

The focus of this thesis has been on the management by companies of the negative socio-environmental impacts incurred as a result of upstream oil industry activities particularly as they pertain to the New Zealand scene, but with awareness that the issues arising are universal to the mining industry worldwide. Given the contention that E & P companies should be responsible for managing social impacts and more broadly ensuring socio-environmental sustainability, this thesis then set about to address how this might be done. This final chapter summarises the outcomes from that research and then in conclusion, discusses why these companies should act responsibly.

8.2 Summary: Lessons Learned

In Chapter 1 the stated purpose of this thesis was to consider the relationships of petrochemical companies with host communities by a) examining social impacts and issues, b) critiquing the effectiveness of the social practices of petrochemical companies and specifically those surveyed in Taranaki, and c) proposing a way forward based on a CD model of social intervention.

A context for discussing the industry was provided in Chapter 2 by describing the technical processes, legal framework and industry culture that shape and determine how the industry is

acted out. The rights and entitlements of oil companies to operate on private land, the geological determination of where activities will take place, the time frames for work programmes and the highly competitive and risky nature of the industry inform the junctures at which companies will impact on the physical and social environment.

Chapter 3 described the political, economic, social and cultural impacts of the oil industry that occur at a macro level affecting nation-states and the global economy. Micro effects were described as those experienced by communities who are directly affected by the day-to-day operations of these companies – namely landowners who lease land to the companies, residents who live near to operations and indigenous groups who exercise environmental stewardship over their ancestral lands.

A theoretical framework for the community relations of E & P companies proposed in Chapter 4 that two broad approaches or traditions can be identified from traditional and current practices of companies, those of public relations and community development. PR has become pre-eminent as a result of the environmental lobby publicising the poor environmental performance of oil and gas E & P companies. PR was a response by these companies to counter negative claims and to market the company as environmentally responsible and socially responsive. The PR approach is a defensive position in that it has developed in response to attack and as such is perceived as ad hoc and reactionary. Communities viewed from this tradition must be won over, negotiated and bartered with in order to gain ground. Concessions and compensation are provided as short-term options to enable the company to operate unencumbered by affected communities or NGO advocates, and at minimal cost and with minimal compliance. These stakeholders are viewed as “thorns in the side” of companies who want to just get on with their job. The validation for PR comes from New Right neo-liberalism wherein corporates are afforded substantial power by governments and where it is believed the market will somehow engender social equity and socio-environmental best practice.

CD is an alternative approach that is gaining acceptance with many large corporates and which emanates from socialist and development theories. The cornerstones of CD are social justice, human rights and sustainable development, and the key practice methodologies are SA,

participation and empowerment and social learning, using advocacy, facilitation and bicultural communication skills. CD is informed by social science so it has a framework for understanding and predicting human and collective behaviour whereas PR is may be seen as reductionist in that interactions are isolated and independent of analysis that connects underlying socio-political processes in a predictable way.

Chapter 4 identified the range of strategies used by E & P companies in engaging with communities as communications, sponsorship and social investment, consultation, social assessment and environmental assessments, compensation and mitigation, corporate social responsibility, pressure by companies, power over communities and social auditing. Each of those strategies can be undertaken as a function of both PR and CD, however outcomes and process will differ according to the underlying motive of each approach, the former of which is to account for the interests of the company and the latter to preserve the well-being of human beings.

Findings from research on three petrochemical companies in Taranaki were presented in Chapter 5 and these were critiqued in terms of their bias toward either a PR or CD approach. These reveal that generally, companies' perceptions of an appropriate role in managing industrial impacts is analogous to that of a "good neighbour", SA and social development are not perceived to be economically rational company roles, and contributions to the community are benevolent gestures or strategic business investments.

Of the three companies surveyed in Taranaki it was found that:

- SA is not routinely undertaken by any of them
- Work with affected communities is not a dedicated function of any of the companies
- Only one employs a social scientist to work with communities
- Social intervention is largely restricted to consent-based consultation, information sharing, donations and sponsorship
- Monitoring of social performance is limited to community perception surveys

- There is an awareness of the need to build and maintain ongoing relationships with affected stakeholders.

This tends to indicate a social concern only to the extent that legal requirements are met, and to ensure community dissatisfaction is sufficiently mitigated to enable the business to continue operations. This is not surprising – reflecting the divergent base line goals of communities who seek to maximise their quality of life and companies who seek to maximise shareholder returns – but not inevitable.

Chapter 6 addresses in depth three tools of CD namely, SA, participation methods and iwi consultation which were identified as critical to a more responsive, respectful and effective model of social practice for the petrochemical industry. These tools are integrated into an CD model of practice in Chapter 7, a fundamental departure for oil companies that moves away from the PR model of impact management to a more systematic approach incorporating social policy, the use of social practitioners, SA, participation, an iwi relations programme, the use of communication plans and agreements, social investment and social evaluation. This approach places a greater onus on companies to take responsibility for the development of affected communities. It argues for a strategic rather than a “common sense” approach, an ethics rather than expediency determined impact management regime, and the utilisation of professional practitioners who are appropriately applied social scientists or development specialists as the key to maintaining the integrity of such a programme.

8.3 A New Role for Corporates

This thesis has identified how companies might work with site affected communities. To conclude, this section addresses the question of why a new approach is in the interests of petrochemical, particularly E & P, companies.

A philosophical argument for a greater social responsibility for companies comes with a compelling economic rationale. This is illustrated by examples where ad hoc consultative and traditional PR approaches to working with affected communities were hugely ineffective, expensive and resulted in acrimonious relationships. A SA/developmental approach is unlikely to

have produced the same outcomes or incurred the lavish expenses of corporate litigation and lost time.

There is a moral rationale for CSR. E & P operations-affected communities including tribal bodies in New Zealand are increasingly being placed in the position of having to protect their interests against commercial interests. Iwi and hapu in particular are bearing a burden of being consulted repeatedly as councils and developers go about meeting their statutory obligations to consult. In order to participate and defend their rights communities have had to, or need to, develop an exploration literacy – to understand the mechanics of well-site construction, drilling mud and rig schedules – simply to understand and manage the implications of living next to an oil field. This comes with a personal and financial cost. Iwi have needed to develop an expertise in environmental issues well beyond customary knowledge in order to meet their cultural obligations to their people as environmental guardians, and to protect their interests.

Why, with all the resources and expertise they possess, do the primary benefactors of petroleum mining, the companies themselves, not bear the burden of social and environmental protection? They have the time to focus on the issues, a deep knowledge and understanding of the industry and its impacts and the resources to ensure their activities do not negatively affect. They can in fact *enhance* the environments within which they operate.

The obvious answer is that traditionally these companies have been able to achieve their shareholder objectives without bearing a social burden/social cost. A number of reasons for this have been put forward ranging from a perceived conflict with the companies' core business and 'disciplinary chauvinism' to a lack of awareness of the benefits of a developmental approach and lack of legislative requirement or management will.

To some extent companies are now bearing the burden of socio-environmental management. Legislation and lobbying have put environmental concerns high on the business agenda and in some cases they have become integral to business practice. In Indonesia, oil exploration workers working offshore but close to a fishing village were able to operate without undertaking an EIA. Concerned that they might damage the marine environment, which was seen to be critical to the

tourism industry and subsistence fishing, the company commissioned their own report and modified their drilling programme in light of the recommendations given (Anecdotal report from former expatriated staff: 1999). This example bodes well for a vision of social responsibility, surpassing the tedious tolls of companies who subscribe to the “we don’t get involved in politics” cop-out and the “nobody said we had to” line, the flip side to which plays, “I was only following orders.”

Good environmental performance has also affected companies where it counts, at the bottom-line where it has proved to be a competitive advantage. Critics of Shell (see Venening: 2000 and others) concede that having Shell as the operator is preferable to a company that is not as responsive to socio-environmental concerns. Shareholders are opting to invest in socially responsible companies. Rio Tinto Ltd, (Davy: 1999, 2), as a result of community opposition, employed people with social and environmental qualifications and discovered:

The results are appearing and they show that managing a company’s community relationships well does indeed pay dividends. Done very well, community relations can distinguish a company from its competitors ... and ...successful global resources companies would be those that mastered [these] new competencies.

While environmental and social considerations may or can sit alongside this bottom-line focus, their visit will be short-lived if low oil prices, or low returns undermine the company’s economic viability. Oil companies can and do go down during times of recession.

Companies influence communities in various and sometimes unpredictable ways. If the companies’ plans for managing these impacts are to have integrity, it is important that communities participate in planning how their interests, values and priorities are to be reflected in the management of mitigation practices and programmes. Hence it is not desirable for companies to assume full responsibility for environment management. This is not to say that companies should not be proactive in protecting the interests of vulnerable communities, they just should not presume to have the answers.

While indications are that many oil companies are now addressing their role as corporate citizens and adopting the ethics of social responsibility and building social capital particularly in developing countries, the practices have yet to find their way in a comprehensive way to many of the smaller operators in Taranaki. The notion of corporate citizenship according to Drucker (in Marsden & Andriof: 1998) ‘... means active commitment. It means responsibility. It means making a difference in one’s community, one’s society, one’s country.’ He might well add “one’s world” reflecting the globalisation of industrial impacts.

Arguably corporates should adopt a responsible role in the community, simply because they can. Knowledge confers a responsibility in society that citizens should expect. We expect that the doctor will take a lead in treating the accident victim and the adult will step in to protect the child, regardless of their legal relationship.

Adopting a responsible attitude is a start. Implementing programmes is the second step. In order to do this, corporates who are still loitering in the PR closet need to venture out and take a more comprehensive and sustainable approach to their work with communities. So fixated, it seems, are these companies on their bottom-line interests they would prefer to flounder around, in and out of courts, spending millions of dollars on fighting embittered communities, than spend a cent on community development approaches. Ironically, so fearful are they are pursuing not-for-profit agendas, they have missed the commercial opportunities that this form of stakeholder management can derive.

Ironic also is that the industry touts and embraces leading edge technology and expertise in exploration and production activities, while stakeholder management, the public face of the company, is often relegated to administrators and engineers as an extra duty. It is hardly surprising that communities are frustrated and find it necessary to guide companies in how to behave.

The World Wildlife Fund (in Marsden and Andriof: 1998, 14) has found a name for these companies in its typology of companies according to their citizenship attitudes and performances. These typologies are:

1. Ostriches – who are inactive and completely unaware of their environmental or social impacts or any pressures to take action
2. Chickens lickers – are reactive and make ad hoc, non-strategic responses to pressure as and when they see the need to
3. Green hornets – are proactive. They make a strategic commitment based on a combination of pragmatism and vision
4. Robin Hoods – are hyperactive. They are the visionary evangelists.

Suffice to say we need to see more green hornets and Robin Hoods in New Zealand.

Community relations must be upgraded to a professional and core function of companies. Effective social practice is primarily about process not about geology. Indeed public confidence in scientific facts put forward by companies has been seriously undermined (ibid, 15). This misfit of vocation and skill produces what Beck (in ibid, p15) calls:

... the fissures and gaps between scientific and social rationality in dealing with the hazardous potential of civilisation. The two sides talk past each other. Social movements raise questions that are not answered by the risk technicians at all, and the technicians answer questions which miss the point of what was really asked and what feeds public anxiety.

This thesis has argued that E & P companies have a social policy role to play and that in doing so, they will not compromise their commercial goals and may in fact, contribute markedly to them. It has inferred that the role must be informed by social theory and practice in order to preserve the integrity of the company and the well-being of communities. It suggests, in closing that the industry might turn to its own character, as described in the ending quote from Foster and Trap (1992, 1), in initiating a new way forward in the management of social relations.

Oil finders are positive thinkers (negative thinkers do not find oil), they develop creativity through visual thinking, they have vivid imaginations controlled by facts, they have a great desire to find oil, they are self motivating and self-starting, they are optimistic, they are persistent, and, above all, they love the thrill of discovery and the deep satisfaction of being able to use science and art to find a valuable deposit for the betterment of humankind.

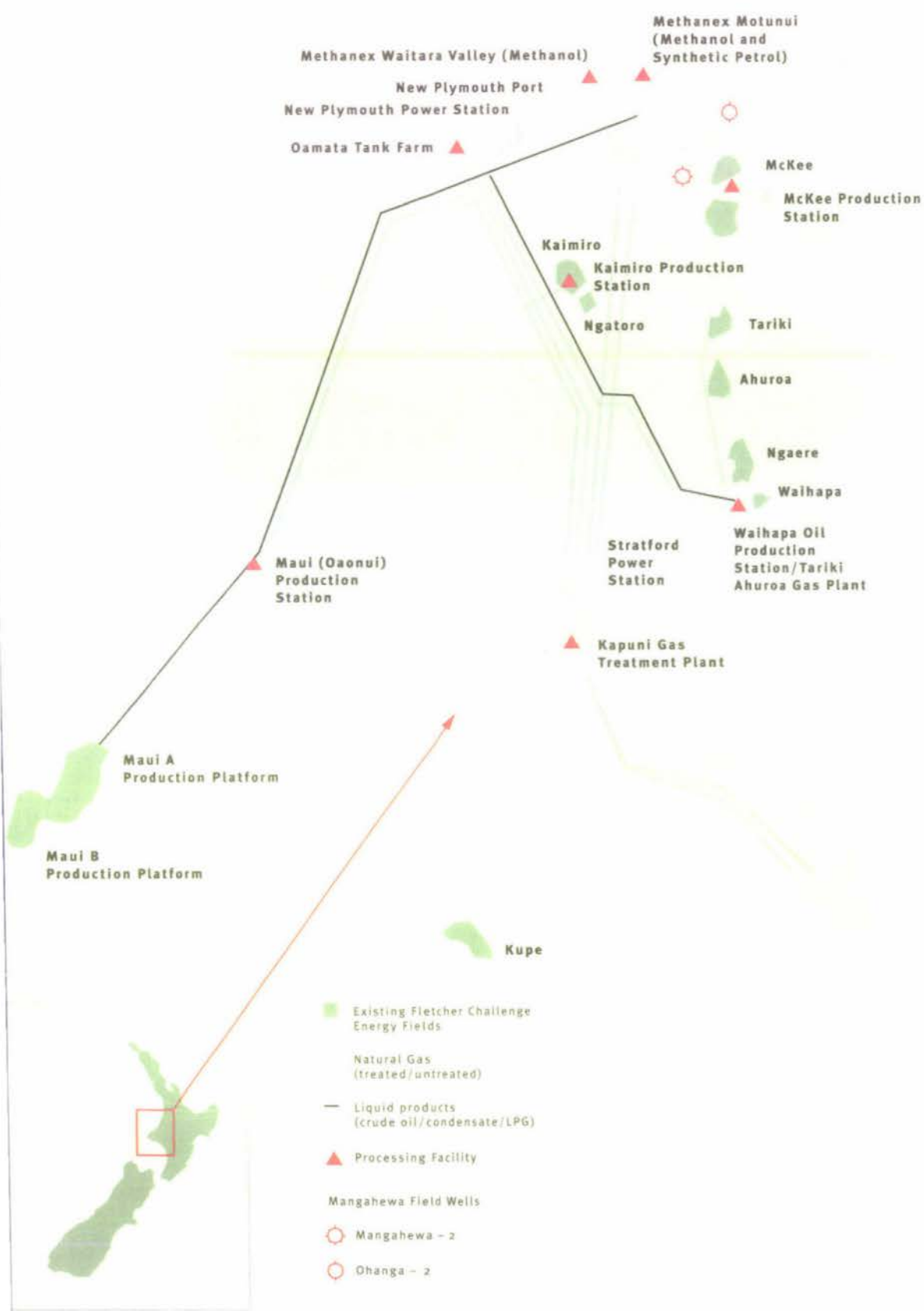
APPENDICES

Appendix 1 Taranaki oil and gas field location map

Appendix 2 Permitted areas in Taranaki

Appendix 3 Permit holders and operators in NZ

Appendix 4 Mangahewa 3D seismic location map



Exploration Activity



Petroleum prospecting licences and exploration permits

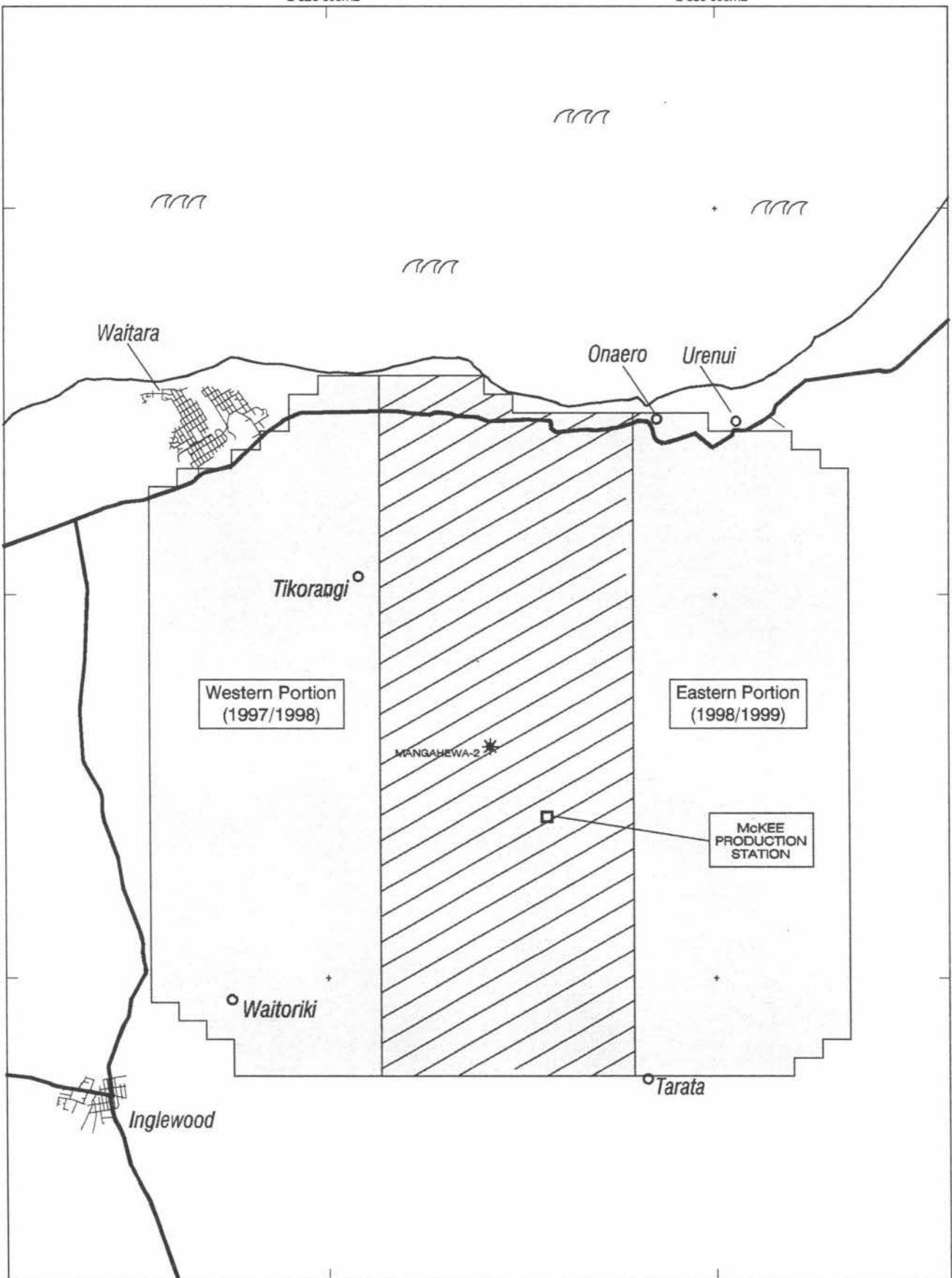
PERMIT LICENCE	AREA (km ²)	TERM	PARTICIPATING INTERESTS (* = operator)	SUMMARY OF WORK PROGRAMME OBLIGATIONS (as at 7.9.98)	DUE DATE
NORTHLAND					
PEP 3862	48864.92	5 years from 01.04.98 (Second Term)	*Conoco Northland Ltd56.67 Inpex Northland Limited33.33 Todd Petroleum Mining Company Ltd10.00	Finalise rig selection.	01.06.99
WAIKATO					
PEP 3863	33.0745	5 years from 01.07.96 (First Term)	*Solid Energy New Zealand Limited100.00	Drill a minimum of two slimline exploration wells.	01.07.99
PEP 3864	1454.06	5 years from 21.04.97 (First Term)	*Southgas Resources Limited100.00	Drill three stratigraphic holes	20.04.99
EAST COAST					
PEP 38325	5508.93	5 years from 10.05.96 (First Term)	Enenco Exploration Limited50.00 *Westech Energy New Zealand Limited50.00	Acquire, process and interpret 25 km ² of 3D seismic data.	10.05.99
PEP 38326	7146.087	5 years from 10.05.96 (First Term)	Enenco Exploration Limited 50.00 *Westech Energy New Zealand Limited 50.00	Acquire, process and interpret 25 km ² of 3D seismic data.	10.05.99
PEP 38327	6226.316	5 years from 04.06.96 (First Term)	*Asia Pacific Oil Co100.00	Acquire a minimum of 300 km of new seismic data.	31.03.99
PEP 38323	3140.792	5 years from 01.07.96 (First Term)	*Indo Pacific Energy (NZ) Ltd40.00 Boral Energy Resources NZ Ltd37.50 Trans-Orient Petroleum (NZ) Ltd22.50	Synthesise and interpret recently acquired seismic.	01.07.99
PEP 38329	5551.894	5 years from 10.05.96 (First Term)	Enenco Exploration Limited 50.00 *Westech Energy New Zealand Limited 50.00	Drill one well.	25.09.98
PEP 38330	4307.357	5 years from 01.07.96 (First Term)	*Indo Pacific Energy (NZ) Ltd34.00 Moondance Energy Ltd33.00 Mosaic Oil NL20.00 Continental Oil NL13.00	Acquire, process and interpret 60 km of seismic data and commit to drill a well.	01.07.99
PEP 38331	406.914	5 years from 24.06.97 (First Term)	*GEL Exploration Inc70.00 Tyers Petroleum Pty Ltd30.00	Acquire, process and interpret 35 km of new seismic data	24.06.99
PEP 38332	4047.36	5 years from 24.06.97 (First Term)	*Indo Pacific Energy (NZ) Ltd42.50 Boral Energy Resources NZ Limited37.50 Trans Orient Petroleum Co (NZ) Ltd20.00	Reprocess 100 km of seismic and acquire 25 km of new seismic.	24.12.98
PEP 38333	9485.393	5 years from 12.01.98 (First Term)	*Westech Energy New Zealand Limited50.00 Enenco Exploration Limited50.00	Reprocess 300 km of existing seismic and integrate with results of Titihaoa-1.	12.01.99
PEP 38334	4732.19	5 years from 21.07.98 (First Term)	*GEL Exploration Inc70.00 Tyers Petroleum Pty Ltd30.00	Compile existing data and conduct gravity survey over major anticlines.	21.07.99
TARANAKI BASIN					
PEP 38413	1336.14	5 years from 01.01.98 (Second Term)	Cultus Petroleum NL50.00 Shell (Petroleum Mining) Company Ltd35.00 Todd Petroleum Mining Company Ltd15.00 *Shell Todd Oil Services Ltd0.00	Drill one exploration well and reprocess 150 km of existing seismic data.	01.01.99
PEP 38455	2133.61	5 years from 01.12.95 (First Term)	Preussag Energie GmbH33.33 BHP Petroleum (Asia Pacific) Incorporated33.33 *Fletcher Challenge Energy Taranaki Limited33.33	Complete structural cross section balancing of the Kaheru thrust.	31.03.99
PEP 38459	780.5559	5 years from 01.12.95 (First Term)	*Fletcher Challenge Energy Taranaki Limited66.67 Preussag Energie GmbH33.33	Drill one exploration well.	01.12.98
PEP 38460	5217.027	5 years from 23.09.96 (First Term)	*Stewart Petroleum Company Ltd50.00 Pan Pacific Petroleum NL50.00	Undertake geochemical modelling, reprocess 300 km of existing seismic, acquire 200 km of new seismic and complete an evaluation of the permit. Commit to drill a well.	22.09.98
PEP 38461	2279.51	5 years from 30.04.97 (First Term)	Petrocorp Offshore (No 7) Limited37.50 Shell (Petroleum Mining) Company37.50 Todd Petroleum Mining Company25.00 *Shell Todd Oil Services Limited0.00	Undertake an initial appraisal of the permit area and reprocess 16 km ² of 3D seismic data.	30.10.98
PEP 38462	5966.4	5 years from 21.01.98 (First Term)	*Spectrum Exploration Limited80.00 Fletcher Challenge Energy Taranaki Limited20.00	Reprocess 200 km of existing seismic. Undertake 2D fluid flow and maturation modelling of hydrocarbon generation.	21.01.99
PEP 38463	2062.68	5 years from 10.10.97 (First Term)	*Pacific Tiger Energy (NZ) Ltd100.00	Comprehensive review of seismic and well data and conduct prospect and lead review.	10.10.98
PEP 38464	106.651	5 years from 28.11.97 (First Term)	Antrim Oil and Gas Limited50.00 *GeoSphere Investments Limited32.00 Re-source Exploration Limited16.00 Ngati Te Whiti Hapu Society Inc2.00	Correlate existing wells within the permit area, construct a depositional model for the Matemateanga Formation. Reprocess existing seismic and commence 50 km seismic acquisition programme.	28.11.98



PEP 3865	706.488	5 years from 24.11.97 (First Term)	*Fletcher Challenge Energy Taranaki Limited100.00	Conduct geotechnical studies on all existing data within the permit area and commit to acquire 100 km of new seismic data.	24.11.98
PEP 3866	5736.104	5 years from 16.06.98 (First Term)	*Stewart Petroleum Company Limited100.00	Complete an evaluation of leads within the permit and commit to reprocess 300 km of existing seismic data.	16.06.99
PPL 3805	255.018	4 years from 01.08.98 (Third Term)	*Fletcher Challenge Energy Taranaki Limited50.00 Southern Petroleum (Ohanga) Ltd50.00	Drill one well.	01.12.98
PPL 3806	122.4	3 years from 01.08.98 (Third Term)	*Fletcher Challenge Energy Taranaki Limited 46.125 Southern Petroleum (Ohanga) Limited46.125 Ngatoro Energy Limited7.750	Reprocess 300 km of seismic and acquire 20 km of new seismic.	31.07.99
PEP 3811	119.262	5 years from 01.12.95 (First Term)	*Fletcher Challenge Energy Taranaki Limited50.00 Southern Petroleum (Ohanga) Ltd50.00	Interpret 3D dataset within permit area and commit to drill one exploration well.	01.12.98
PEP 3812	89.0737	5 years from 30.01.96 (First Term)	*Marabella Enterprises Ltd53.34 Santos Petroleum (NZ) Limited46.66	Drill an exploration well.	30.01.99
PEP 3816	267.7966	5 years from 30.01.96 (First Term)	*Marabella Enterprises Ltd39.60 Awe New Zealand Pty Ltd25.00 Indo Pacific Energy (NZ) Limited17.40 PEP 38716 Limited7.40 Euro Pacific Energy Pty Ltd6.60 Durum Energy Corporation Ltd4.00	Drill one exploration well.	31.10.98
PEP 3878	232.2941	5 years from 01.12.95 (First Term)	*Fletcher Challenge Energy Taranaki Limited50.00 Southern Petroleum (Ohanga) Ltd50.00	Acquire, process and interpret 25 km of new seismic data or drill an exploration well.	01.12.98
PEP 3879	355.65	5 years from 12.08.96 (First Term)	*Swift Energy New Zealand Limited100.00	Reinterpret existing seismic, conduct seismic reprocessing if warranted and acquire a minimum of 30 km of new seismic and commit to drill a well.	11.02.99
PEP 3870	25.428	5 years from 02.09.96 (First Term)	*Indo Pacific Energy (NZ) Ltd50.00 Trans-Orient Petroleum Co (NZ) Limited50.00	Acquire 15 km of seismic	01.03.99
PEP 3871	120.984	5 years from 07.07.97 (First Term)	*GEL Exploration Inc100.00	Drill one exploration well.	07.07.99
PEP 3872	258.26	5 years from 01.05.97 (First Term)	*Discovery Geo (Australia) Corporation100.00	Acquire 30 km of seismic data.	01.05.99
PEP 3873	80.15662	5 years from 30.10.97 (First Term)	*Indo Pacific Energy (NZ) Ltd40.00 Trans-Orient Petroleum Co (NZ) Ltd40.00 Gondwana Energy (NZ) Ltd20.00	Reprocess 50 km of seismic data and re-evaluate prospects and leads within the permit area.	31.01.99
PEP 38724	626.005	5 years from 28.10.97 (First Term)	*Amity Oil New Zealand Limited100.00	Complete a comprehensive review of the permit area.	28.10.98
PEP 38725	123.2404	5 years from 10.03.98 (First Term)	*Shell Todd Oil Services Ltd100.00	Review results of Cardiff-1 and re-evaluate the potential for commercial development. Determine an exploration well drilling location.	10.09.99
PEP 38726	198.01	5 years from 10.03.98 (First Term)	*Fletcher Challenge Energy Taranaki Limited100.00	Acquire 67 km of 3D seismic data.	10.03.99
PEP 38727	22.3934	5 years from 07.05.98 (First Term)	*Amity Oil New Zealand Limited100.00	Complete a review of existing seismic, well, aeromagnetic and gravity data.	07.05.99
PEP 38728	198.50	5 years from 17.08.98 (First Term)	*Marabella Enterprises Ltd100.00	Reprocess 100 km of existing seismic and undertake geological and geophysical review of permit area.	17.08.99
WANGANUI					
PPL 38708	2671.89	5 years from 01.02.96 (Second Term)	Enerco Exploration (South Wanganui) Ltd50.00 *Westech Energy New Zealand Limited50.00	Drill one exploration well.	01.02.99
WEST COAST					
PEP 38505	433.109	5 years from 30.01.96 (First Term)	Pacrim Energy NL 50.00 *Petroleum Resources Ltd30.00 Cultus Petroleum NL20.00	Drill a well.	30.01.99
PEP 38507	20.66	5 years from 19.08.96 (First Term)	*Solid Energy New Zealand Limited100.00	Drill a minimum of two slimline exploration wells.	18.08.99
PEP 38508	199.235	5 years from 14.10.97 (First Term)	*Macdonald Investments Limited100.00	Acquire 8 km of new seismic data and drill up to two slimhole stratigraphic wells and two slimhole production test wells.	14.10.98
PEP 38510	1127.705	5 years from 31.08.98 (First Term)	*Tyers Petroleum Pty Ltd100.00	Review existing data and complete gravity surveys over previously identified leads and prospects.	31.08.99
CANTERBURY					
PEP 38254	17605.20	5 years from 22.04.96 (First Term)	*Pacrim Energy NL100.00	Commit to drill one well.	22.01.99
PEP 38255	14175.32	5 years from 22.04.96 (First Term)	*Pacrim Energy NL100.00	Acquire, process and interpret 100 km of new seismic data and integrate new seismic data with existing and reprocessed seismic data.	21.10.98
PEP 38256	11125.00	5 years from 25.08.97 (First Term)	*Indo Pacific Energy (NZ) Ltd35.00 Trans-Orient Petroleum Co (NZ) Limited35.00 Trans New Zealand Oil Company (NZ) Ltd30.00	Locate and analyse petroleum seeps, model existing and acquire new gravity data, scan and process existing seismic data.	24.11.98
SOUTHLAND					
PEP 38212	57.4332	5 years from 14.10.97 (First Term)	*Macdonald Investments Limited100.00	Reprocess existing seismic data and drill one slimhole test production well.	14.10.98
PEP 38213	3336.766	5 years from 06.08.98 (First Term)	*Geosphere Exploration Limited 50.00 Thomasson International Ventures Inc 50.00	Review stratigraphy and distribution of source, reservoir and seal and either reprocess 50 km of seismic or commence acquisition of new seismic data.	06.08.99
GREAT SOUTH BASIN					
PEP 38211	25,000.00	5 years from 30.09.97 (First Term)	*Antrim Oil and Gas Limited100.00	Reprocess 2,000 km of seismic. Evaluate source rock potential. Undertake petrophysical review and basin modelling studies.	31.03.99

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-  Seismic Acquisition Area
-  Seismic Acquisition in both summer 1997/1998 & summer 1998/1999



MANGAHEWA 3D SEISMIC SURVEY LOCATION MAP



**FLETCHER CHALLENGE
ENERGY
TARANAKI**

FIGURE No:	
REPORT No:	
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