THE REALITY OF ENVIRONMENTAL REGULATION:

An analysis of the environmental regulatory structure of Forestry Tasmania

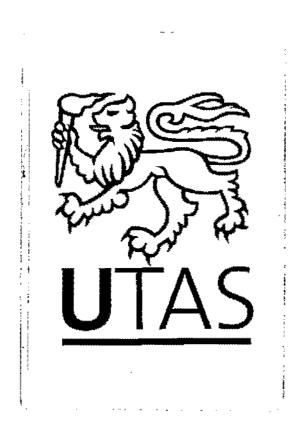
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A thesis submitted in partial fulfilment of the requirements for the Degree of Masters in Criminology and Corrections

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DEDICATION

For those passionate people within the system, motivated and courageous who continue to stand up for what they believe is right, and hold steady to the principles of good environmental practice. You are vital to this system – it is your strength and determination to hold true to your values that will assist the system to change, allowing us all to enjoy the environment for many generations to come.



ABSTRACT

As part of the Tasmanian forestry industry, Forestry Tasmania (FT) (a Government Business Enterprise) operates under a system of environmental regulation incorporating co-regulation coupled with self-management mechanisms. For over 30 years environmental regulation of the Tasmanian forest industry has been shadowed by both controversy and continuing calls for scrutiny. Embedded in this shadow are concerns relating to; the ability of the current regulatory system to adequately regulate and prevent environmental harm; close ties between regulators, industry, and government; and possible undue economic influence imposed on regulators.

The objective of this thesis is to uncover the 'black box' of regulatory literature by providing a detailed examination of forestry regulation as related to the Government Business Enterprise, FT. This examination documents the systems and structures in place and extends further to look at the reality of such regulation.

This thesis draws on information from a number of sources including discussions with individuals at a senior level within FT and the regulatory agency (Forest Practices Authority) as well as interviews with a number of Forest Practices Officers (FPOs) as a form of ground level regulation within FT. In addition public sources of information including Hansard and High Court Judgements are used.

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Thank you

STATEMENT OF AUTHORITY OF ACCESS

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Nicola Pearce

DECLARATION OF AUTHORSHIP

This thesis contains no material which has been accepted for a degree or diploma by the University or any other institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the text of the thesis.

Nicola Pearce

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ABBREVIATIONS

AFS Australian Forestry Standard

CR co-regulation

CARs Corrective Action Reports (Forestry Tasmania)

CAR Comprehensive, Adequate and Representative (Reserve)

DFMP Reports District Forest Management Plan Reports

DPIW Department of Primary Industries and Water

EC Environmental Coordinator

EDO Environmental Defenders Office

EMS Environmental Management System

EPA Environmental Protection Authority

EPBC Act Environmental Protection and Biodiversity Conservation Act 1999

FOI Act Freedom of Information Act 1991

FPA Forest Practices Authority

FPB Forest Practices Board

FPAC Forest Practices Advisory Council

FPC Forest Practices Code

FPO Forest Practices Officer

FPP Forest Practices Plan

FPS Forest Practices System

FT Forestry Tasmania

JASANZ Joint Accreditation System of Australia and New Zealand

MP Manager of Planning

PEFC Program for Endorsement of Forestry Certification

RFA Regional Forest Agreement

SAI Global Standards Australia International Global Limited

SEMS Safety and Environmental Management System

SFM Sustainable Forest Management

SHE Officer Safety Health and Environment Officer

SR self-regulation

TCFA Tasmanian Community Forest Agreement

TRFA Tasmanian Regional Forest Agreement

TSS Threatened Species Section

FOREWORD

Throughout this research those values which shone through were the pride vested in the system, the motivation to do a good job, and dedication to continually improve the system. On so many occasions, when asked why they had decided to talk to me, people commented that they felt the research was worthwhile in that it would assist to improve the system – some had no qualms with what was currently in place, while others did. The overriding sentiment was that where the research can influence, improve, provide meaningful data, or promote the development of changes to the current system of environmental regulation, there was a sense of obligation to do just that.

I love the wilderness – but more than that I have a great respect for it and everything that it encompasses. I am not afraid to admit that I have grave concerns for what we are doing to the world today, and more closely to home, what we have done and continue to do in Tasmania. As humans we sometimes forget that we share this planet with so many other things, and for a large majority of us it is all too easy to be apathetic about our influence on the environment around us and ignore the destruction we cause everyday in the name of convenience, economics, employment, and comfort. The decisions we made yesterday and the choices we make today are not limited to the effects on just us tomorrow, but on everything. We seem to believe we have a right to decide the way the world should go. If this is true and we have such power, we should exercise it with almighty discretion, because the way we choose to live our lives today imposes something far greater on those who do not get to make that decision – we are just one species, yet the impact of our lives may be permanently etched into the environment of future generations.

Chapter 1

INTRODUCTION: the nature of environmental regulation

'[W]e've got something out there, and we're responsible for ensuring that we don't destroy it... it has a wider implication than just making money' (Interviewed FPO).

For over thirty years the regulation of Tasmania's forests has continued to be at the centre of controversy. At the heart of this debate are two conflicting beliefs; the state considers current regulation is adequate, whilst conservation movements and numerous members of the public consider it to be fatally flawed, legalising sustained harm to the environment. The industry is guided and regulated by numerous laws, codes of practice, agreements, policies and regulations. Regulations bave changed, regulators have changed, yet inquiries and reports continue to be called for and carry on being conducted, with the belief persisting that it is still not right. Under the banner of green criminology this thesis looks at the specific area of environmental regulation, touching also on the notion of environmental harm.

Regulators play a vital role in the success of the regulation process 'bringing to bear' rules on those 'sought to be influenced or controlled' (Baldwin & Cave 1999: 96). Wilkinson (2003:2) states that '[t]he Tasmanian system is based on the principle that the people actually carrying out and supervising the forest operations are the people who are best placed to deliver the code'. An increasing body of literature however suggests that close ties between regulator and regulated and/or political pressure can lead to the risk of 'regulatory capture' (see Snider 1991; Reichman 1992; Wilkinson 1999; Ayres & Braithwaite 1992; Baldwin & Cave 1999). Ongoing public scrutiny of the Tasmanian forest industry indicates concern with the current structure and processes employed. Allegations of corruption and undetected environmental harm are premised on 'closed door' policies, and 'close ties' between industry, industry regulators, and government

(see Flanagan 2007; Wilderness Society 2007; The Tasmanian Greens 2007; Davis 2003).

Why Regulate?

Forests are seen as playing two essential roles in terms of ecology and economics (Jokela 2001). The regime adopted to regulate forestry is seen as linked to the fundamental philosophy encompassed by the industry (White in press). Forestry regulation seeks to '[foster] regulatory compliance in relation to the goal of 'sustainable development'.' Regulation exists due to the notion of harm. Regardless of the definition adopted relating to harm (there are multiple) (see Halsey & White 1998), the notion adopted will influence and provide the justifications for such regulation – regulation is generally assumed on the auspices of 'minimising harm'.

What is environmental harm?

There is no single definition to satisfy 'environmental harm' (White in press). Harm to the environment is not a crime unless it violates written law. What is seen as harm will depend on the definition taken. A strictly legal definition narrows harm to what is prescribed by law (an unauthorised act or omission in violation of written law); a sociolegal approach however defines harm 'in terms of damaging practices which may or may not be encapsulated under existing criminal law' (Halsey & White 1998: 345-346). A strict legal approach therefore cannot only fail to criminalise serious long-term devastation of the environment, but can foster its continuance. White (in press: 5) suggests '[t]he criteria for 'harm' and 'crime', therefore, depends very much upon the values, knowledge and deliberations of those investigating the nature of human activity'.

Harm is ultimately about values and priorities, not just what the law says it is.

The definition of environmental harm is greatly influenced by the philosophy taken to understand the relationship between humans and the environment (see below).

Table 1.1: Philosophical approaches to human/environment interaction

Philosophical Approach	Conception of Human Beings	Conception of natural environment
ANTHROPOCENTRISM Human centred	Biologically, mentally, and morally superior over all other living and non-living entities	Instrumental use
BIOCENTRISM Species centred	Morally and ethically equal to all other entities	Humans as inextricably linked to environment: intrinsic value
ECOCENTRISM Socio-ecological centred	Socially and ethically responsible for the integrity of non-human entities	Refuses to place humans above or below nature: dialectical relationship

Source: Adapted from Halsey and White (1998: 348-349).

The philosophical approach taken bas the ability to shape what is seen as the role of the environment and is crucial in determining what environmental harm is conceived to be. It can determine the perceived 'value' of the environment and the way harm is measured influencing what is perceived as 'sustainable'. Halsey and White (1998: 347) note concern over acceptance and lacking critique of state definitions of environmental crime, which limit attention on 'social practices which are legal, but environmentally disastrous'. Who shapes the law and the agendas behind such greatly impede the end result. Halsey and White state 'many of the most serious forms of environmental harm in fact constitute 'normal social practice' (346).

Regulation - an overview

Baldwin and Cave (1999: 96) state that the general purpose of regulation is 'to influence behaviour'. Regulation by and large serves a number of different social interests. These interests in turn may shape the form and nature of regulation.

Models of regulation

Regulation may take a number of differing forms. Command and control has the greatest involvement of the state. The state can intervene and order the 'regulated' to act in certain ways and refrain from acting in others in the interest of the public. Due to its inflexible nature and high economic costs, traditional command and control approaches have been replaced in many areas with innovative instruments.

Self-regulation (SR) utilises the least involvement of the state, existing where organised groups regulate their own members (Gunningham, Grabosky, & Sinclair 1998 citing OECD 1994). There are a variety of differing models within the SR sphere. These lie on a continuum from no state intervention to substantial state involvement, from voluntary/total SR, to mandated SR, to mandatory partial SR (see Gunningham et al 1998: 51). SR gives industry responsibility and control to regulate effectively and fairly to serve both public and private interests.

SR seeks industry based compliance and relies 'substantially on the goodwill and cooperation of individual firms... The emphasis is upon gaining a moral commitment from participants, and upon using information, education, technology sharing, and perhaps peer group pressure, as a means to achieve this end' (Sinclair 1997: 534). Writers in discussing SR have identified a number of strengths (such as flexibility to address issues & cost effectiveness) and weaknesses (ineffective enforcement, limited accountability/visibility of systems, self-serving structures) associated with such regimes (See Ayres & Braithwaite 1992; Balwin & Cave 1999; Gunningham et al 1998: 52).

There is often a perception that SR systems lack accountability in their application. Writers have suggested a number of mechanisms assist promotion of accountability (Baldwin & Cave 1999) including;

- Enforced SR
- Codes of practice
- Environmental partnerships
- Corporate environmental reporting
- Environmental self-auditing.
- Co-regulation
- Environmental management systems (EMS)

(Sinclair 1997: 532)

Barriers to successful implementation of such mechanisms however exist. Kirkland and Thompson (1999) discuss obstacles relating to EMS regarding implementation, lack of awareness of need. Iimited personnel knowledge, skills and expertise, and perceived costs.

SR can involve governments directly engaging in the regulatory process. Co-regulation (CR) is generally perceived as consisting of some form of industry regulation coupled with government oversight. CR can be distinguished from pure SR as the industry's autonomy is limited in 'both goal setting and implementation' (Gunningham 2002: 7). CR is premised on 'industry self-management' where there is a 'transfer of responsibility for administering legislation and regulation from government to industry', implying some form of SR by industry.

Gunningham et al (1998) suggest there is significant overlap in the use of instruments throughout the varying fields of regulation. The push for de-regulation in the 1970's led to the abandonment of 'one size fits all approaches' (Hollander 2006). Increasing literature suggests it is short sighted to place regulatory approaches into tight fitting boxes as 'nearly all regulatory mechanisms incorporate some elements of self-regulation' and 'nearly all self-regulatory mechanisms of governmental significance are subject to

some degree of external state influence' (Baldwin & Cave 1999: 136-137; also see Ayres & Braithwaite 1992; Sinclair 1997). According to Hollander 'self regulation is more accurately understood as a mixed regime involving degrees of state compulsion, regulatory flexibility, and industry engagement' (18).

Theories on regulation

The field of regulation has seen a shift away from traditional command and control mechanisms and the automatic use of criminal sanctions, towards flexible strategies premised on 'notions of trust and cooperation between the regulator and regulated' (Hollander 2006: 17). This collaborative relationship is seen as fostering and improving environmental performance in the commercial sphere. Although there is extensive literature on the areas of corporate and environmental regulation, for the present purposes focus shall be contained to two prominent theories in these particular areas.

Ayres and Braithwaite (1992) provide a model of 'responsive regulation' using a pyramid structure for both enforcement and intervention. The enforcement pyramid provides the structure for a hierarchy of sanctions, where the base level houses the least interventionist response. Those who fail to respond to this level of regulation can progressively move higher up the pyramid to increasing interventionist responses (Gunningham et al 1998: 52).

Ayres and Braithwaite suggest regulatory strategies cannot be based simply on persuasion or on punishment but should incorporate a range of compliance seeking strategies. The efficiency of regulators does not necessarily lie in the warding of a 'big stick', but rather the threat of such and provision of a response measured to the event/s that precipitated it (36). The effectiveness of the pyramids is through 'the existence of the gradients and peaks', as these funnel most 'regulatory actions to the base of the pyramid – in the realms of persuasion and self-regulation' (Ayres & Braithwaite 1992: 39).

The model views actors as a 'political citizen' who invariably operate within the law, rather than calculating their actions against the consequences of anticipated penalties (Hollander 2006: 18). Braithwaite (2000: 101-102) suggests a mix of punishment and persuasion allows regulators to '[nurture] expectations of responsibility and cooperation within the regulatory culture' promoting the spirit of the law despite its 'gaps and loopholes', whilst '[b]y getting tough with cheaters, actors... suffer when motivated by their rational economic selves, and are given reason to favour their social responsible, law-abiding selves' as 'they find the regulator forgiving'.

Haines (1997) states that the responsive regulation model provides a number of benefits over purely punitive strategies including influencing corporate culture, tailoring response to seriousness of harm, and seeking deterrence through means other than just criminal law responses.

Gunningham and Grabosky's (1998) model of 'smart regulation' goes beyond 'responsive regulation' viewing the key to effective regulation involving a combination of strategies to overcome weaknesses of stand alone environmental policies. Instruments range from education and information to economic incentives. Approaches may involve some degree of SR coupled with prescribed processes and performance standards. Underlying this model is the understanding that 'each regulatory problem presents with a distinctive set of variables'. A number of factors ranging from the nature of the problem through to 'economic and cultural characteristics of the industry and its relationship with third parties' maybe relevant to effectively address a problem (Hollander 2006: 19). Hollander states by having a number of instruments available and looking at the problem with a wider focus the approach 'matches the circumstances, the compliance burden matches the risk, and the enforcement mechanisms are realistic and effective' (19).

Win-win strategies are measures that allow industry to 'enhance its competitive position (or productivity) at the same time as achieving tangible environmental improvements' (Sinclair 1997: 547). Hollander (2006: 19-20) suggests that environmental regulation tends to be 'most effective when environmentally responsible behaviour equates with

good business'. For example; where 'processes designed to improve environmental outcomes are also cost effective or provide a producer with a market advantage'.

What unites both Ayres and Braithwaite's and Gunningham et al's theories is the use of third parties in the sphere of SR. Third parties play an important role as '[a]gents of informal social control' (Gunningham et al. 1998; 93; also see Hollander 2006) seeking to maintain credibility of the SR regime. Third party form may differ in terms of their relationship to those regulated (direct or indirect) (see Hollander's 2006; 20) and effectiveness of oversight will depend on ability to access information. Snider (1991) states that pro-regulatory pressure groups are central to the regulatory process due to the pressure they exert on the state to maintain enforcement in the sphere of corporate crime.

Ayres and Braithwaite's (1992) tripartism policy utilises relevant public interest groups (PIGs) as equal third players in the game able to punish both the firm, but also 'regulators who fail to punish for non-compliance' (56). PIGs can access all information available to regulators, are provided 'a seat at the negotiating table... when deals are done' and are granted 'the same standing to sue or prosecute under the regulatory statute as the regulator' (Ayres & Braithwaite 1992: 57-58). By providing a third independent seat in the regulatory process the likelihood of 'regulatory capture' is substantially diminished.

Main theoretical issues and key concepts

Discussion touches on corporate crime. In situations where corporations fall short of legal (and moral) responsibilities in the nature of their business, harm to and/or failure to protect the environment (regardless of criminal status) may arise. White (in press: 10) states that at 'its broadest level, the ways in which regulation works or does not work is fundamentally shaped by systemic imperatives and philosophical vision'.

The state & regulation

Evidence has shown 'the modern state, despite the documented damage corporate crime causes, has frequently acted to vitiate laws against it. It has drawn up ineffective laws (Calavita 1986; Carson 1982; 1980 a, b), impeded enforcement (Coleman 1985; Levi 1981, 1984; Gunningham 1974, 1987), savagely cut the budgets of regulatory agencies and interfered in their decision-making processes if they were upsetting important business interests' (Snider 1991: 216). State reluctance to pass and enforce stringent laws is seen related to concerns of frightening off needed investment. Action is generally only taken against capital when it is 'necessary to protect the long-range stability of the state' (215). State willingness to reel in the reins on the corporate sector may be shaped by;

[T]he strength of the forces promoting and opposing regulation; the type of corporate crime, especially its visibility; the perceived regulatory alternatives; the relation of the corporate crime to key structural factors such as the needs of capital; its relation to dominant societal values; and the past and present relationship of the particular state and its hureaucracies to major classes (Snider 1991: 218)

There has been a tendency for the state to take a back seat, if one at all in the process, with businesses being given increasing freedom to be trustworthy as a means to 'support and encourage good business practice' (Haines 1997: 2).

Benign big gun

Ayres and Braithwaite (1992) note concern of the 'benign big gun' where agencies have the capacity and possess varying powers of punishment, but do not invoke available powers. Robinson (2003: 11 cited in White & Habibis 2005: 152) moves heyond Ayres and Braithwaite's hierarchy to suggest that various sized sticks should be carried together in an enforcement toolhox. Prosecution as such is not a level to be reached, but an equal player used as the appropriate response when the situation calls.

Speak softly and carry a big stick' is an appropriate aphorism for today's environmental regulator, but to be effective there must be certainty that the big stick can and will be used and the how, why and where of its use. It is the anticipation of enforcement action that confers the ability to deter.

Haines states that there are a number of theoretical and practical difficulties in deploying the criminal law to address corporate harm including reluctance on the part of the state to prosecute private companies appointed by the state, suggesting a stunting of power resulting from ideological attachment. Snider (1991) notes that imposition of further stringent and punitive sanctions is likely to be ineffectual, as like past and existing laws, they can and will inevitably be ignored.

Snider sees the 'root cause of regulatory inadequacy' heing 'the power of the corporate sector to defeat or undermine proposals which appear to them to have the potential to challenge their power or profitability'(218). Concerns have been raised in relation to penalties which fall short of economic benefits received when regulations are breached. Economists suggest fines should be levied in proportion to the harm caused and length of time of non-compliance (Snider 1991). Snider also suggests power could be brought back into the 'pistol' by '[i]mproving corporate law... challenging the privilege of limited liability, and making individual members of corporate Boards of Directors responsible to the community, not just to shareholders' (226-227).

Regulatory capture

The capture concept is 'characterised by a situation where the regulators act in the interests of the regulated at the expense of the community at large' (Hollander 2006: 17) where regulated firms 'win the hearts and minds of the regulators' causing 'regulators to care about different things' (Ayres & Braithwaite 1992: 63).

Haines (1997: 16) suggests it is necessary to look at the 'social processes involved in the context of regulation' with focus on organisation culture and the effects of structural demands, 'rather than assuming an organisation has unlimited choice of direction or behaviour'. Hollander (2006: 18) suggests that focus should look to the relationships and regulatory strategies, rather than institutional arrangements, in order to understand the system of regulation. Concern resides in overlooking the 'social power context' within which environmental deviance occurs (Simon 2000: 634).

The problem of environmental destruction thus represents one of the most dangerous contradictions of giving priority to the value of accumulating wealth without regard to the means of doing so (638).

Hollander (citing Sharp 1996) states that regulatory capture 'is accentuated in a user pays environment where the regulated fund the regulatory system' (18). Corruption may be more likely in agencies that maintain close cooperative relationships with industry and engaged in regular sanctioning of the industry (Ayres & Braithwaite 1992: 56 citing Braithwaite et al, 1986). The influence of husiness actors extends beyond the enactment and administration of law (see Braithwaite & Drahos 2000), through to 'their relative abilities to define what regulatory law is, how it is violated, and enforced' (Reichman 1992: 244). Reichman looks 'backstage' to focus on 'how everyday business transactions organise a firm's compliance with regulatory rules' (245), moving beyond analysis of simply regulator and regulated and into the complex networks that exist in business. Reichman argues that 'the shape of regulatory policy, including the distribution of regulatory violations, can be linked to the patterns of cultural authority that develop

within a particular business sphere' (245). Regulatory authority 'relates to the relative power of firms to embed their compliance in larger social networks that allow them to authenticate their actions while marginalising and discrediting the actions of others' (245).

Reichman sees regulator responses as 'shaped by (and in turn shapes) the regulatory authority of regulated entities'. Whereby 'firms mobilise their power to shape regulatory response by embedding their activities within a network of interorganisational relations that authenticate and legitimate their actions' (Reichman 1992: 257). Sinclair states the importance of industry input into regulatory design as this provides a sense of ownership to industry, and also limits industry exerting less desirable influence (1997). Ayres and Braithwaite (1992: 56) note the ability of regular rotation of personnel to address the risks of corruption and capture, making the 'suspect confront... different law enforcers on each contact'.

Summary of literature relating to regulating the forest

A review of the literature suggests that environmental regulation in the context of the forestry industry occurs for two specific reasons; to regulate human impact on the environment for the environments sake, and to regulate human resource consumption in the name of economics. The guiding principle that connects these two rationales is 'sustainable development'. The key issue for this thesis relates to the dynamics and limitations of SR in practice, specifically within the context of competing economic and environmental values.

Contribution of the thesis

There is an extensive body of literature dealing with the nature of environmental harm and correspondingly environmental regulation (see Gunningham et al 1998; Ayres & Braithwaite 1992; Situ & Emmons 2000; Haines 1997; White 2004), however for present purposes this thesis seeks to contribute to discussions in these areas by providing a detailed examination of forestry regulation in the Tasmanian context. The intention of this thesis is to look at the way in which regulation occurs in reality in regards to the Tasmanian Government Business Enterprise, Forestry Tasmania (FT).

What comes to light from this area of study is the distinct lack of research that focuses on regulation from the point of view of the regulator and those regulated. Despite new, rehashed, critiqued and 'smart' theories on regulation, very little time and focus has been given to talking directly with 'practitioners'. This area of study lacks an understanding of what 'practitioners' themselves see as their main issues. The area of 'regulation' has increasingly become pitched at the level of models and approaches, rather than people and actual practices. Theory will fall short without understanding and documentation of what actually occurs at the ground level: the level of the regulator and regulated. That said, this thesis bases its conclusions primarily on interviews conducted with FT's Forest Practices Officers (FPOs), who form part of the environmental regulatory system in place around FT.

Through primary research and interviews this thesis seeks to uncover the 'black box' of regulatory theory as applied to forestry, providing detailed descriptions of the people and processes involved in regulation in practice, not simply in theory. This research provides significant information in relation to the field of environmental regulation as it presents insights into the everyday application of such.

Methodology

A number of information sources were used to assist analysis of FT's environmental regulatory system. These included newspaper articles, radio transcripts, State and Federal Parliament (via Hansard), transcripts and Summary of Judgments from the High Court, annual public reports, a number of other sources predominantly accessed through websites (see the list of references), and finally discussions with individuals at a senior level of FT and the regulatory agency (Forest Practices Authority) as well as interviews with a number of Forest Practices Officers who are a form of ground level regulation within FT.

Discussions with FT

Prior to conducting interviews with FT's FPOs, FT was contacted to establish the appropriate procedure for research. FT's Chief Scientist was initially contacted and provided a background of the research and literature as well as the interview schedule. The Chief Scientist suggested prior to accessing FPOs, further discussions were required with the Manager of Planning at FT and Chief FPO with the FPA to increase understanding of the regulatory system as a whole beyond FPOs.

Discussions were conducted with FT's Manager of Planning, and Environmental Coordinator, as well as the Chief FPO. These were taped with permission, and transcripts were emailed to respective people. Permission was gained to use this information in the thesis.

FPO Interviews

Following discussions at a senior level with FT it was agreed that optimum response would be best achieved via email sent from within FT sanctioning the project. This email

(see Appendix 1) was sent by the Manager of Planning and included an information letter for potential participants outlining the research and contact details of the researcher.

Interested participants were to contact the researcher (not FT) to maintain anonymity. Contact could be made via email, phone or letter and was to detail preferred type (face to face or phone), location or relevant telephone number, and availability for the interview.

All interest was received via email and replied to confirming the date, time and location.

Basic background information was asked to be supplied prior to the interview.

Out of 78 FPOs emailed, 7 responses were received within 6 days (the majority received within the first two days). All respondents were interviewed. The respondents sample included all five districts (Bass, Mersey, Murchison, Huon and Derwent), Planning and Inspecting qualifications, and a variety of roles (see below).

Table 1.2: Position Description of interviewed Forest Practices Officers

Position Description	Number of FPOs Interviewed
Planning Coordinator	1
Sales Coordinator	1
Works Coordinator	1
Forest Manager	1
Planning Officer	2
District Safety and Environment Officer	1

The age of respondents ranged from 32 to 51 years old. Length of time as an accredited FPO ranged from the inception of the *Forest Practices Act* in 1985 to under one year.

Two face to face interviews were conducted at the University of Tasmania, whilst the remainder were conducted over the phone as the majority of respondents were from areas outside of Hobart. Interviews ranged from 35 minutes through to one and quarter hours.

All interviews were taped with permission of interviewees. Interviews were conducted using a questionnaire template (see Appendix 2). This template guided the interview, but where appropriate the researcher asked clarification questions on information supplied. Questions were open ended allowing for flexible responses by interviewees. Interviews focused on workplace activities, education and training, research, and key issues relating to environmental regulation.

The information gathered is used as support statements to highlight issues relating to the underlying themes of the thesis. Information sought provided the researcher with a background to relevant issues, and is by no means exhaustive of the points of view of all FPOs employed within FT. The information received effectively highlighted issues, with direct quotes italicised. The purpose of the interviews was to discover the scope of ground level issues from the perspective of FPOs.

Due to the small size of Tasmania and the industry itself, to maintain anonymity FPOs are not identified in the presentation of information and quotes will not be accompanied with an alias identity since in combination quotations could serve to identify specific respondents.

The thesis comprises of two main sections. Chapter 2 examines and documents the main systems and structures in which environmental regulation occurs relating to FT, whilst Chapter 3 draws on research collected, looking beyond the documented regulatory framework, to analyse the reality of regulation.

Chapter 2 REGULATION RELATING TO FORESTRY TASMANIA

Who is Forestry Tasmania?

Forestry Tasmania (FT) is a Government Business Enterprise established in 1994 under the *Forestry Act 1920*, replacing the Forestry Commission as a public forestry corporation. By virtue of the Act FT is delegated exclusive control and management of all State forests (s8(1)(c)(i)). State forest is '[f]orest on State land which has been designated multiple-use forest by Parliament' (FPA 2007). This includes 1.4 million hectares of multiple use forest, and 178,000 hectares of forest reserves (FT 2007a), representing 22% of the total area of Tasmania (FT 2007b).

FT operates in terms of a triple bottom line, with the aim of the business to provide 'sustainable forest management (SFM) which is environmentally sound, socially acceptable and economically viable within the context of the Tasmanian Regional Forest Agreement' (FT 2007b). FT is run by an independent board, responsible for the final decisions of the business.

How is the environment regulated?

Tasmania's logging industry has dramatically grown over the last 30 years. The Environmental Defenders Office (EDO) (2001: 81) states that 'logging has risen to become the major cause of habitat loss and alteration on land', consequently the forest industry has come under increasing scrutiny over its practices and its regulation of the environment. Heightened public concern has resulted in numerous changes in the legislation and codes that govern the industry. This inturn has influenced current regulation and protection of the environment. The current framework for environmental regulation encompasses multiple interconnected internal and external systems. Some of these are compulsory regimes, whilst others have been adopted on a voluntary basis. This

chapter seeks to provide an overview of the main ways (but not claiming to be exhaustive) in which the environment is regulated as related to FT. Discussion of these parallel processes shall be assisted by the use of flowcharts to explain how the systems cross over and correspond with one another.

External Framework

Relevant laws and legislation:

Tasmania was the first state in Australia to regulate forest practices through legislation (Forest Practices Act 1985) and a code of forest practice (1987) (Wilkinson 2003: 1).

The two corc Acts that regulate the forestry industry regarding use of the environment are the Forestry Act 1920 and the Forest Practices Act 1985 (EDO 2001). The industry is subject to numerous legal and other requirements that are interlinked which encompass State and Federal legislation and policies (see Appendix 3) as well as the Forest Practices Code (see Figure 2.3).

The Forestry Act 1920 defines environmental harm (as per section 5 of the Environmental Management and Pollution Control Act 1994) as 'any adverse effect on the environment (of whatever degree or duration)'. Section 5 defines 'serious' and 'material' environmental harm (see Appendix 4).

The Forest Practices Act provides regulation for forestry on public and private land within Tasmania. This Act provides for 'compulsory Forest Practices Plans, a Forest Practices Code, a Forest Practices [Authority] and a Forest Practices Tribunal' (EDO 2001: 81).

In Tasmania, the approach has been to consolidate relevant legislation into a single *Forest Practices Act*, which seeks wherever possible to deliver the requirements of other legislation in a streamlined, integrated and efficient manner (Wilkinson 2003: 2).

The Forest Practices Code (FPC) 'administered by the Forest Practices Authority (FPA) covers aspects of environmental care, including biodiversity, geodiversity, visual amenity and the protection of natural and cultural values (including soil and water resources)' (Department of Infrastructure, Energy and Resources [DIER] 2007). The FPC seeks to address 'all aspects of existing and future forest operations on private and public land, including pre-harvest planning, silviculture (including thinning), road construction, plantation establishment and reforestation' (DIER 2007).

In 1997, the Tasmanian Regional Forest Agreement (TRFA) (a 20 year plan for conservation and sustainable management of native forests) was agreed to by the State and Federal Government. Based on 'years of scientific study, consultation and negotiation covering a diverse range of interests' (Department of Agriculture, Fisheries and Forestry 2007), this agreement sought to provide 'certainty of access to industry, a program of intensive forest management to increase the supply of wood and hoost employment, and an enhanced capacity to manage the industry in an ecologically sustainable manner' (DIER 2007). In 2005 further land was added to the reserve system under the Tasmanian Community Forest Agreement. Currently 47% of Tasmania's forests are reserved. It has been noted however that land locked in reserves over the past 10 years was in fact of little use to industry and limited in ecological value (Marr 1997).

A few of these areas were victories. Others were either already reserved or, as in the north Styx, very difficult to log, or such as the Weld or Florentine, later logged anyway (Flanagan 2007: 29).

In February 2007, the State and Federal Governments agreed to amended the RFA, following the Federal Court decision in Robert Brown v Forestry Tasmania (No 4)

[2006] FCA 1729 (see Appendix 5). These amendments were justified by the Premier, Paul Lennon, for their ability to 'resolve the uncertainty created by this court decision and restore the original policy intent of the Regional Forest Agreement and the more recent Community Forest Agreement' (2007).

Power of Parliament over court decisions:

Parliament has the power to change laws, make illegal actions legal and can do so retrospectively. Judges within the court system do not have the power to override Parliament as they are required to interpret the written law. It is important to realise that policies are not laws. Policies, guidelines, strategies, and codes of practice, although produced by the government, in fact have no force of law. These may in fact be written 'for public relations purposes or as a general guide for government officers', conveying what the government aims to do (EDO 2001: 12).

Exemptions:

In Tasmania citizens' ability to protect the natural environment has been stunted as the state continues to provide 'environmental exemptions to powerful industry sectors' including the logging industry (EDO 2001: 17). The Environmental Defenders Office states that '[l]ogging operations are partly quarantined from normal planning controls' (EDO 2001: 82) (see Appendix 6). Such exemptions make it difficult to exercise a legal appeal regarding where and how logging is conducted unless individuals are industry operators or have a direct ownership of, or interest in the affected land.

Debate exists over whether RFA lands are 'exempt' from provisions of the Federal Environment Protection and Biodiversity Conservation Act 1999 (EPCB Act)(see EDO 2007; Flanagan 2007), or whether RFA processes are alternatively 'accredited' by the EPBC Act. The relationship between the two gained attention late in 2006 following the Federal Court ruling in Robert Brown v Forestry Tasmania. The EPBC Act requires Australia to protect rare and endangered species. According to Wilkinson (2003: 5) management of threatened species occurs through a single planning process that 'has

been developed and endorsed as meeting the requirements of both the code of practice and the threatened species legislation, thus avoiding two separate approval processes'.

FT was previously exempt from *Freedom of Information Act 1991* (FOI Act) until 2005 by way of section 32A(a) ('Information relating to commercial persons') and breaches of the *Forest Practices Act* up until 1999 (s41 5a).

Compulsory Regulation:

Tasmania's forest industry is predominantly regulated by the Forest Practices Authority (FPA) (previously known as the Forest Practices Board [FPB]). In 2005 the FPA was setup under the *Forest Practices Act 1985* as an 'independent statutory body responsible for the development and management of the Forest Practices System' (FPS) (FPA 2007). The FPA integrated a number of changes to the system in place under the FPB (FPA 2005: 8) (see Appendix 7). The FPA currently consists of a board of directors, advisory committee and a team of scientists, advisors, compliance officers and administrative staff. This system works on a co-regulatory approach, 'involving responsible self-management by the industry, with independent monitoring and enforcement by the FPA' (FPA 2007).

The objective of the FPA is to foster 'a co-operative approach towards policy development and management in forest practices matters' (Forest Practices Act 1985 s4B). The FPA's primary responsibilities include administering the FPC and certifying Forest Practices Plans (FPPs). The FPA seeks to ensure all forest practices on both public and private forests provide reasonable protection for the natural and cultural values of the forest, operating tenure blind (DIER 2007; Chief FPO).

Forest Practices Plans (FPPs):

FPPs are 'the tool for delivering the code at an operation level' (Wilkinson 2003: 2). All logging operations require an FPP to be completed and certified prior to operations beginning. Forest operations include '[p]lanting trees, managing trees before they are

harvested, harvesting forest products and any related land clearing, land preparation, [quarries,] burning-off, access construction or transport operation' (FPA 2007). These plans must comply with the FPC and be in accordance with the Act. FPPs 'contain prescriptions and a map detailing how the planned operations will be conducted' (FPA 2007). FPPs may be written by anyone (section 18 Forest Practices Act), but can only be certified by a Planning FPO. Certification entails the FPO checking that the plan was 'prepared in accordance with the requirements of the [FPC] and all administrative instructions issued by the FPA' (FPA 2006: 26). This must occur prior to work starting. Once certified the front cover of the FPP is sent to the FPA (see Appendix 8), unless special values are identified (in which case the whole FPP is sent).

An FPO must report to the FPA on compliance of the FPP within 30 days following the completion of each discrete operational phase of the forest operations authorised under the plan (section 25a).

FT have an established set of guidelines regarding public access to FPPs. Requests may be verbal or in writing. Generally an appointment is required to view FPPs so that the responsible FPO (who approved the plan) can provide a basic interpretation of the document. Requests must identify the specific FPP required. Both directly and indirectly/non affected parties may view FPPs.

FT guidelines state that '[c]ommercial and in-confidence aspects should not be disclosed. These include the names of contractors and processors, specific wood volumes and the specific locations of Aboriginal heritage sites or threatened species' (FT 2007c: 1). The signature page is also excluded. The special values report and evaluation sheets are not deemed 'part' of the plan. In cases where the FPP has been certified, special values information 'can be made available' where specifically requested (FT 2007c: 2). Released FPPs are required to be accompanied with explanatory notes. The minimum cost to access FPPs is \$20 (60c per page) this cost relates to material and administration costs. No set time is stipulated to gain access to such information.

Forest Practices Code (FPC):

The FPC (established under section 30 of the Forest Practices Act) prescribes 'the manner in which forest practices are to be conducted so as to provide reasonable protection to the environment' (FPB 2000: 7). The FPC 'provides a practical set of guidelines and standards for the protection of environmental values during forest operations' (7).

The code is a fairly slim document (125 pages), but is supported by approximately two and a half thousand pages of technical manuals and related legislation that is referenced. All major forestry operations are required to comply with the FPC. The FPC however does not state whether areas of forest should be in reserves (decided by the Tasmanian Parliament), whether land can be cleared and converted to agriculture (*Permanent Native Forestry Estate Policy 2007*) or whether old growth forests can be logged.

Forest Practices Act:

The objective benchmarks of the FPS of Tasmania are stated in the *Forest Practices Act* 1985 under Schedule 7.

SCHEDULE 7 - Objective of the Forest Practices System of Tasmania (Sections 4B & 37B)

The objective of the State's forest practices system is to achieve sustainable management of Crown and private forests with due care for the environment while delivering, in a way that is as far as possible self-funding –

- (a) an emphasis on self-regulation, and
- (b) planning before forest operations, and
- (c) delegated and decentralized approvals for forest practices plans and other forest practices matters, and
- a forest practices code which provides practical standards for forest management, timber harvesting and other forest operations; and
- (e) an emphasis on consultation and education, and
- (ea) an emphasis on research, review and continuing improvement, and
- (eb) the conservation of threatened native vegetation communities; and
- (f) provision for the rehabilitation of land in cases where the forest practices code is contravened, and
- (g) an independent appeal process, and
- (h) through the declaration of private timber reserves a means by which private land holders are able to ensure the security of their forest resources.

Forest Practices Officers (FPOs):

Compliance officers, known as FPOs provide supervision in relation to monitoring forest operations to ensure these comply with the *Forest Practices Act*. FPOs are predominately employed by the industry, providing the self-management aspect of this system. FT employs just under half of all FPOs (currently employing 88)(MP). The FPA employs 4 FPOs (FPA 2006).

FPOs are trained and accredited by the FPA to plan, supervise and monitor forest practices. FPOs are nominated by their employer. If accepted by the FPA (having satisfied the FPA in terms of training, forestry and operational experience – tertiary qualifications are not a prerequisite) they undertake a training course of four, one week modules over a six month period. They cover the major areas of the code, submit assignments on these modules, sit exams and complete a major assessment project. FPOs are required to attend a one to two day refresher course once every two years and have the opportunity to attend a number of relevant training courses throughout the year including fauna and flora evaluations, cultural heritage, and landscape features.

FPOs may either be inspecting or planning. Inspecting FPOs 'have powers under the act to enter upon land, inspect operations and issue notices to ensure compliance' (Chief FPO). Planning FPOs delegation extends beyond this as they have the ability to certify FPPs.

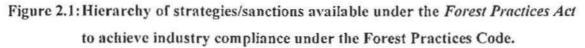
The Powers of FPOs

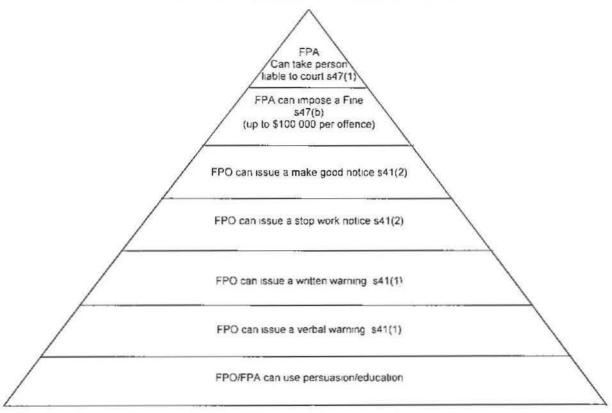
FPOs play a major role in educating ground level operators. Pro-active action is taken prior to operations beginning to inform those conducting the works of relevant issues related to the site. In situations where an error has been made whilst undertaking forestry operations FPOs have the ability to respond informally offering advice or instruction.

All regulators have prosecutorial discretion as to whether they will take any action with respect to offences (Chief FPO).

Section 41(1) of the *Forest Practices Act* is a more formal approach to addressing problems, but remains premised on 'fixing the problem' (Chief FPO). It confers power on FPOs to give notice orally or in writing in situations where the FPO believes provisions of a certified FPP are not being complied with. Notice can be given whilst the plan is in force, or anytime in the 12 months following when the plan ceases to be in force. Where this request is not complied with the FPO through their discretion can issue a stop work notice (section 42a), order the person in charge to repair the damage, or carry out further work. The FPA has the ability to impose a fine (up to \$100,000 per offence) or prosecute for serious breaches anytime up until 3 years following the offence being committed (this was extended in 2005 from 12 months). Serious breaches are regarded as cases involving 'environmental harm or major deficiencies in a company's supervisory and management system' (Wilkinson 2003: 6). Application of penalties lies at the discretion of the FPA.

Any breach of substance should be reported to the FPA, regardless of action taken by FPOs. All written section 41 notices are provided to the FPA. Notification of verbal warnings however is at the discretion of the FPO in question. The hierarchy of strategies/sanctions available under the *Forest Practices Act* is presented in Figure 2.1.





Source: Drawing on information from Chief FPO & FPA Annual Reports applying

Ayres & Braithwaite's Enforcement Pyramid

FPA Specialists:

Education and training of the industry underpins the role of the FPA. Through FPA specialists covering the areas of earth sciences (including soils, water and geosciences), landscape, cultural heritage (including archaeology and aboriginal heritage), and biodiversity (including zoology and ecology) skills are devolved where information and support is provided to FPOs. The systems works by providing FPOs with the basic relevant skills, processes to help identify issues, and information on the point at which they must seek FPA technical specialists for further advice. Smart planning tools and specialist training in key areas are utilised. For example a computer based Threatened Fauna Advisor Program 'allows foresters to make high level decisions about the management of threatened fauna without having to have expert knowledge of threatened

species' (Wilkinson 2003: 7). FPOs do not rely on FPA specialists in their day to day work, but call upon them in situations beyond their training, to seek advice on interpretation of the Code or other legislation, or to assist in the identification of special values.

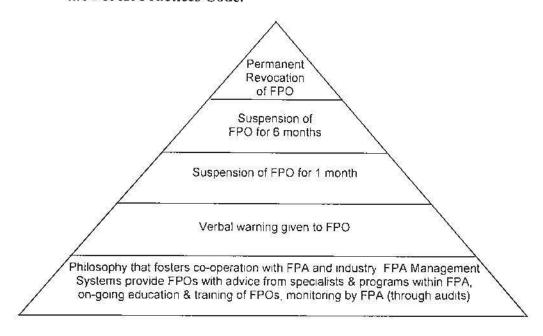
These specialists are engaged in ongoing research in a variety of areas to 'develop planning tools, provide advice and monitor operational outcomes' (Wilkinson 2003; 3). FPA specialists 'work in close partnership with field foresters to ensure that research findings are translated into practical planning tools and operational prescriptions'. This research, often in collaboration with other external researchers is seen as 'underpin[ing] the continual improvement of the [FPC]' (FPA 2007).

FPA Audits:

The FPA independently conducts an annual audit of a sample of FPPs (approximately 15%). This is conducted via an audit protocol utilising a sampling methodology producing a stratified sample by tenure, company, and operational type. The audit looks at 139 factors covering 'forest harvesting, roading and site preparation at various stages of completion', as well as the standard of FPPs (FT 2007b: 37)(see Appendix 9 for list of factors). Each factor is scored out of 4 points. A rating score of 3 is set as the minimum target 'that best represents sound practice and acceptable operational standards required to meet the objectives of the Act and the Code' (FPA 2007: 14). No negative weight is given for bad environmental practices.

This audit 'provides feedback on performance to forest managers, identifying areas where improvements can be made... [and] should provide the broader community with information about the standards being achieved' (Wilkinson 2003: 3). FPOs are also monitored on a regular basis and in terms of the plans that they prepare. The FPA has a three warning disciplinary policy for FPOs. In serious situations the top sanction of permanent revocation of FPO accreditation maybe used immediately (see Figure 2.2).

Figure 2.2: Hierarchy of strategies/sanctions available to achieve regulatory compliance of Forest Practices Officers (FPOs) in their role as enforcing the Forest Practices Code.



Source: Drawing on information from Chief FPO applying Ayres & Braithwaite's Enforcement Pyramid

Forest Practices Advisory Council (FPAC):

This is described as a 'representative body of stakeholders' whose role is to advise the directors of the FPA (FPA 2007). Section 37A(2) states that the council is to consist of a number of people including a government appointed scientist with expertise in forest conservation, a number of industry members, and the chair person of the FPA board. The council does not provide a position for the conservation movement (see Appendix 10).

Forest Practices Tribunal:

The Forest Practices Tribunal, established under section 34 of the *Forest Practices Act* is an independent body which 'conducts hearings and make determinations with respect to appeals that are lodged by aggrieved parties' (FPA 2007). These may be applicants in relation to refused FPPs; either amended or varied, and persons served section 41 notices under the *Forest Practices Act* who wish to appeal against such. Public participation is

'very limited' as 'there is no provision for third parties to lodge appeals or objections' (EDO 2001: 82).

Public role:

The public may report suspected breaches of the FPC to the FPA.

The [FPA] is required to investigate all complaints of non-compliance (Wilkinson 2003: 6).

The public account for approximately 30% of notifications on suspected breaches, but only 30% of those are considered to be actual breaches as per the FPC (Wilkinson 2007).

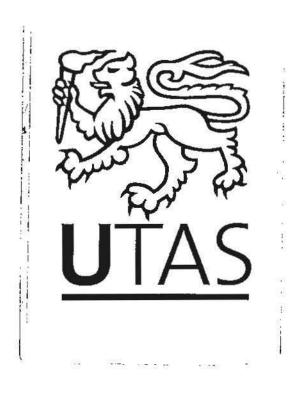
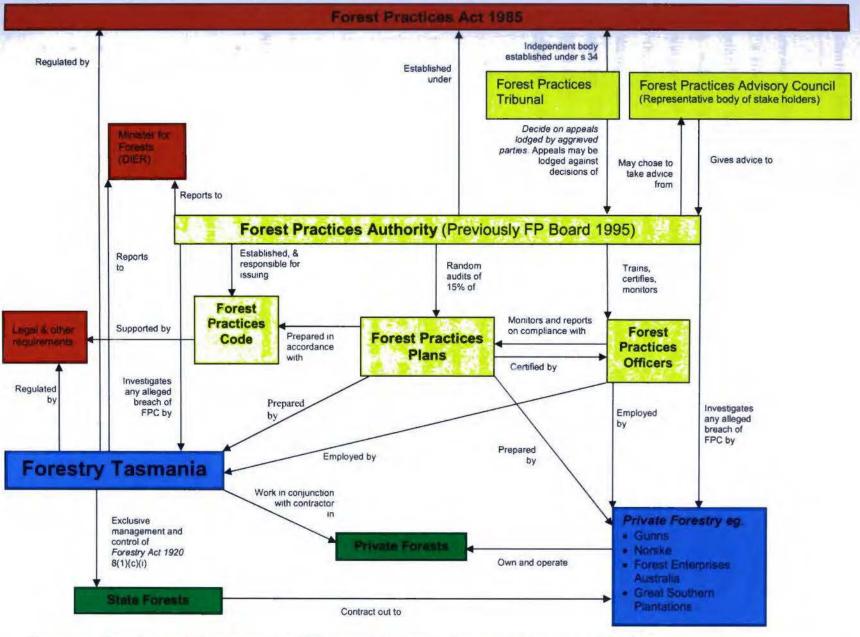


Figure 2.3: Compulsory external regulation as related to Forestry Tasmania



Source: Drawing on information from FT Annual Reports, and conversations with FT & FPA personnel

External Auditor:

FT's environmental performance is audited by Standards Australia International Global Limited (SAI Global) (previously known as Quality Assurance Services). SAI Global is the independent auditor chosen by FT, conducting the first audit against the environmental management system (EMS) ISO 14001 in 2001. SAI Global is accredited by the Joint Accreditation System of Australia and New Zealand (JASANZ) as capable of auditing against the three certification standards currently possessed by FT; the Australian Forestry Standard (AFS)(AS4708), Environmental Management Standard (ISO 14001), and the Australian Standard for the management of Occupational Health and Safety (AS4801).

SAI Global's expert auditors and accredited certification processes provide Forestry Managers with the ability to declare that their forests meet recognised standards of best practice. In addition, the certification scheme is mutually recognised by the Programme for the Endorsement of Forest Certification Schemes (PEFC). This provides SAI Global certified clients with international recognition of their sustainable forestry management practices. (SAI Global 2007)

SAI Global (2007) states the benefits of management system certification include;

- improving; public trust
 risk management
 market entry
 corporate knowledge
 employee commitment
- demonstrating commitment to shareholders
- gaining market recognition
- reducing expenses

SAI Global biannually audits FT (through Surveillance Audits and Compliance Audits) and produces a public summary of the audits. The primary auditor directly employed by SAI Global (previously employed within the mainland forestry industry) is from interstate and to date so are Technical Experts (for example on safety or silviculture) - this is custom, not prescribed. Technical Experts sourced by SAI Global are believed to be from within mainland "industry". FT's Environmental Coordinator is generally in attendance during audits as an observer and escort.

SAI Global scores on three levels. 'Non-Conformance' (top level) is given where there is non-conformance to advice previously given by the auditor, the consequence is that FT loses certification for 3 months, in which time the non-conformance must be corrected and preventative action put in place. If this is completed to the auditor's satisfaction the non-conformance is closed and FT is reissued certification. The next level is 'Areas of Concern', or minor non-conformance. Where found, FT is given 6 months to address these issues. In the following audit these issues are reviewed by the auditor and are either closed off or where not, may lead to a 'Non-Conformance'. The third level is 'Opportunity for Improvement'. These issues are not against the intent of the standards or contrary to any legal requirement, but rather suggestions for improvement. These are voluntary and at the discretion of FT as to whether they shall be acted upon.

The Australian Forestry Standard (AFS):

The AFS was created by AFS Ltd. This company registered the standard with JASANZ, which then endorsed this as containing all the required elements of a sound environmental management system (EMS). The AFS is also endorsed by the PEFC, being one of two global umbrella organisations for forest certification schemes. FT was first certified against the AFS in December 2003.

Forestry Tasmania Accredited as Chosen by capable of testing against **JASANZ** AFS SAI Global Audits against the standards Recognise Endorses Australian International Standard for the Accreditation management of Forum Occupational Health & Safety Recognise (AS4801) Produces Program for Australian 2 annually Recognises **Endorsement of** Forestry Forestry Standard Certification ISO 14001 **summery** Augg Looks at the status & progress of CARs & reports on this in audit Corrective Action Reports (CARs): high, medium, low - Raised If incident occurs

Figure 2.4: Voluntary external auditing system of Forestry Tasmania

Source: Drawing on information from conversations with FT personnel

Internal Framework

FT states that '[e]very employee at [FT] is responsible for Sustainable Forest Management' (FT 2007b: 6). Education was stated to be provided within FT regarding understanding relevant areas of the legal framework that FT must operate within (Environmental Co-ordinator).

Enforced systems of regulation:

Currently 88 of FT's employees are FPOs. Half of these are inspecting, and half planning. FPOs hold a variety of differing employment positions within FT in all five districts and must operate under two hats (as FT employee and FPA FPO) whilst working within FT. FT's FPOs operate in the three main functions of *Planning*, *Sales* and *Works*. These areas and some of the general roles of FT's FPO are described below. Note that the work undertaken varies extensively depending on their position of employment within FT. The roles described below are not exclusive to FPOs within that area.

Planning:

FPOs may be responsible for producing:

- · 3 year plans
- FPPs
- Special values assessments

Table 2.1: Duties relevant to Forest Practices Officers within Planning

Establishing	net coupe area
Produce	Special Values Summary
Decide	systems to be put in place for FPP
Peer Review Process of Plans	Includes Sales and Works FPOs and District Forest Manager Process may involve FPP looked at individually by relevant people within FT, or Discussed in a group where the Forest Manager acts as adjudicator/coordinator of the process
Attain document sign off	by the land owner (manager), processing company and contractor
Sending front cover of FPP to	unless special values are identified and then the whole FPP is sent to the FPA

Source: Drawing on information from conversations with FT personnel

Basic process of conducting Special Values Assessments within Forestry Tasmania

- If presence of a special value is suspected in proposed coupe (eg. Indigenous significance) will call in a FT FPO trained in that area (eg. FPO who has completed FPA's 4 day course in Cultural Heritage)
- 2 FPO determines whether coupe falls into High or Medium archaeology sensitivity zone:
 - Utilises management systems
 - Looks at a number of features to determine sensitivity
- 3. If coupe falls into High sensitivity zone FPA notified
- 4 FPA's specialist (eg. archaeologist or aboriginal heritage officer) will either
 - Consider special value on the phone, or
 - Inspect site
- 5 If inspection of site undertaken FPA will provide recommendations
- If FT allowed to proceed with operations FPA may recheck area following logging & burning

Source: Drawing on information from conversations with FT personnel

Sales (extraction phase):

FPOs are present during the operational phase of the plan, but are not necessarily onsite daily.

Table 2.2: Duties relevant to Forest Practices Officers within Sales

Must refer to the FPP

Supervisor of operation (generally by, but not always an FPO) will provide briefing to workers at an operational level

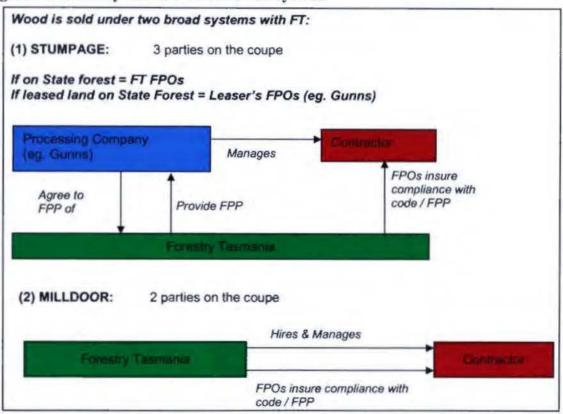
Depending on the system of operation there maybe a sign over/off period of the FPP, in which case the operator will sign the plan stating that they understand all Forest Practices issues in place.

Monitor and seek to achieve compliance with the contractor/people carrying out the operations. A series of check lists may be used to monitor the operation as part of FT's internal Safety and Environmental Management System (SEMS).

Source: Drawing on information from conversations with FT personnel

Figure 2.5: Forestry Tasmania's wood sale systems

Available to discuss/clarify any operational issues



Source: Drawing on information from conversations with FT personnel

Works (reforestation):

FPOs come on site once coupe is harvested (logged) and assist with process of reforestation/establishing plantation.

Table 2.3: Duties relevant to Forest Practices Officers within Works

If such steps h include:	ave not been taken they must organise for the work to be done which may
0	Removing hazardous trees
0	Establishing appropriate fire breaks (as specified in the plan)
0	Conduct the agreed burn plan
0	Collect seeds
0	Arrange sowing seeds
C	Checking indicator plots of seedlings
0	Weed Control
0	Monitoring/control of browsing animals

Source: Drawing on information from conversations with FT personnel

Voluntary systems of regulation

FT has incorporated a number of voluntary forms of regulation as related to the protection of the environment.

Environmental Management System (EMS):

FT began the implementation of its EMS in late 1998. This adoption was related to:

Moves in Europe, North America and to a lesser extent Asia as businesses began
restricting purchasing to internationally certified operators. This change in
international business practices was recognised by senior management at FT and
consequently it was decided that there was a need to cover operations through
recognised certification schemes.

 Certification was encouraged by Federal Government 'in signing on to the Montreal Process for measuring forest sustainability and setting up RFAs that followed Montreal Criteria and Indicators'. Following this, certification was thought to be 'best done on a commercial basis by independent third parties (and at no cost to the taxpayer)' (Manager of Planning, FT; see Department of Premier and Cabinet 2007).

The drivers of certification were largely to maintain competitiveness in world markets and to improve overall environmental management (the FPC only controlled operations covered in FPPs and this did not cover all of FT's operations). With the external certification to the EMS, ISO 14001, the Australian and New Zealand Safety Standard AS4801, and the AFS by SAI Global, FT's internal Safety and Environmental Management System (SEMS) came into being. This system 'sets targets for improving environmental performance, and establishes measures to gauge improvements' (FT Annual Report 2006: 99). This system is designed to ensure compliance with the code and contains approximately 700 key documents. A primary element of SEMS is its ability to continually monitor forest operations and activities. Where incidences of nonconformance to these standards and procedures are found a corrective action report (CAR) is raised.

Corrective Action Reports (CARs):

FT's internal CAR database was up and running by May 2001. As part of the SEMS, CARs may be raised by anyone within FT when an incident (whether safety or environmental) is identified as having occurred. CARs seek to identify what happened, the circumstances/root cause of incident, provide any immediate corrective action required, and implement preventative action.

CARs are broken down into high, medium and low categories. FT uses a risk assessment tool to determine the category as related to the level of the consequence of the incident (see Appendix 11). The status and progress of CARs is reviewed by FT's Environmental Coordinator and the external auditor, SAI Global, who reports on this in their audit.

CARs may be raised following findings of both internal and external audits (see Figure 2.6).

FT Reports:

FT produces three different publicly available reports relating to environmental practices;

1. Annual Report:

Primarily addressing the financial aspects associated with FT)

2. District Forest Management Plan (DFMP) Reports:

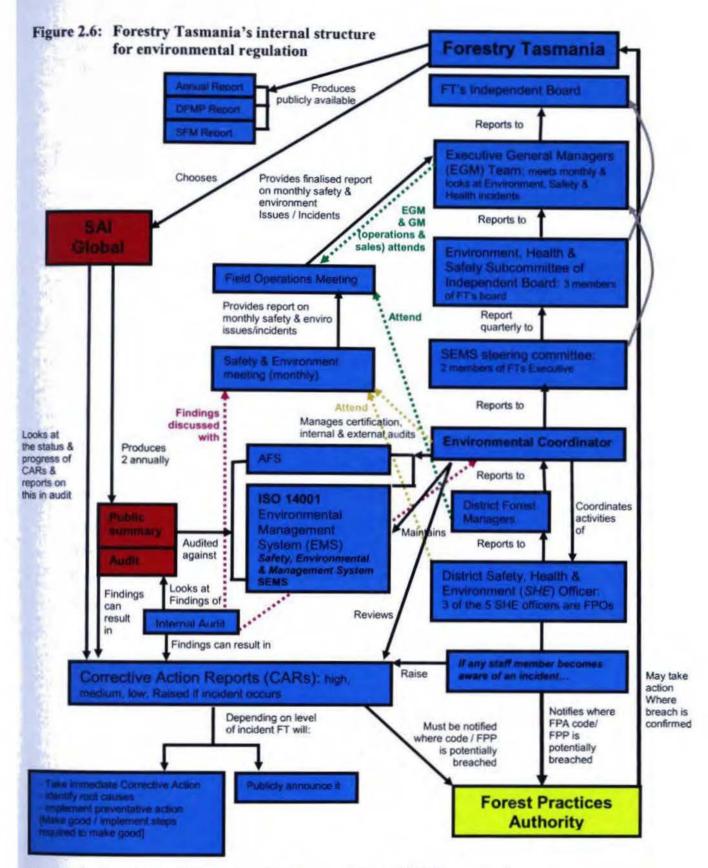
Annual report on requirements of the Forestry Act and RFA

3. Sustainable Forest Management (SFM) Report:

Monitors 'progress made against management aims in the Forest Management Plan and [FT's] annual corporate sustainable forest management objectives and targets' (FT 2007b: 9).

Internal audit:

FT annually conducts its own internal audit for each district and technical branches (for example looking at Workshop and Research Division). This audit program is devised with a focus on external audit findings, any recent changes to the organisation, and perceived risks (whether environmental or safety). FT personnel from the districts conduct the audit, having completed a five day auditor's course through SAI Global. The audit is not publicly available. The findings of the audit are discussed with FT's Safety & Environment group as well as the Forest managers. The audit also results in CARs being raised and rectified/continually monitored.



Source: Drawing on information from conversations with FT personnel

What system of regulation is in place regarding Forestry Tasmania's regulation of the environment?

The system of environmental regulation can be described as co-regulation (CR) which employs both degrees of enforced and voluntary self-regulation (SR) mechanisms. The structure of the external mandatory system (FPA) is imposed by government. This regime has been established in close consultation with the industry it seeks to regulate, and the ground level regulators of this system are employees of the industry controlled by this regulation. The Chief FPO from the FPA described the system as such;

The philosophy of the Act does not use the term 'co-regulation', that's a fairly recent term in regulation literature and the Act goes back to 1985. But the Act basically describes a co-regulatory system because it has the components of co-regulatory system. It attempts to delegate responsibility to the people undertaking activities and it does that through creating these FPOs.

The FPA, created under government legislation oversees, monitors and enforces regulations as stipulated under the Code and corresponding legislation. Industry has the responsibility to self manage (to some degree) their practices, and in the case of FT, they have chosen a number of mechanisms to achieve this 'responsible self-management'. Voluntary mechanisms include creating their SEMS that operates to the standards of 3 external certification schemes relating to environmental and safety systems. This system is audited internally by FT trained auditors, and externally by SAI Global.

Audits and public reports on environmental performance are produced by SAI Global, FT and the FPA. Hand in hand with these reports are a number of other governmental reports including the State Sustainability Indicators Report, and the ongoing reporting required under the RFA.

Wilkinson (2003: 2-3) in describing Tasmania's system of CR states that it 'involves a partnership approach between government and industry', whereby '[u]nder co-regulation,

industry accepts responsibility to self manage within a legislative and policy framework imposed by government' and in line with this 'the role of the government is to provide checks and balances by monitoring standards and by taking corrective action where necessary, using penalties as a last resort'. Hollander (2006: 17) describes this system of regulation as a 'light handed approach' where the 'system is built on industry cooperation where regulation is conceptualised as a partnership between government and business'.

Wilkinson (2003: 5) describes Tasmania's regulatory framework as based on three fundamental objectives;

- 1. To foster cooperation and a partnership approach
- To focus on monitoring and the correction of problems rather than a purely punitive approach
- 3. To seek continuing improvement through training and the devolution of skills

Main social issues as related to current regulatory regime

Campaigns for the preservation of Tasmanian native forest and wilderness, and disputes between the environmental movement and other actors promoting resource extractive and developmental activities in these areas have been a prominent feature of Australian politics since the 1970s (Norton 2006: 600; also see Gcc 2001).

The last 30 years has seen various changes in the Tasmanian forestry industry, yet to date Tasmania does not have a guaranteed politically independent and funded Environmental Protection Authority (EPA) with legislated responsibilities (EDO 2001). Scrutiny and opposition to certain practices of the industry and its major players has remained strong and correspondingly environmental activist groups are increasingly seeking to spread their concerns locally, nationally and internationally (Flanagan 2007).

Primary concerns relate to;

- · regulations that allow environmentally harmful practices
- · failure of regulators to regulate adequately
- · close ties between industry and government
- close ties between industry and regulators
- · limitations on the public ability to gain information on the industry
- domination of the industry by a small number of powerful players

In 2003 Bill Manning, a senior forester and ex-FPO gave evidence to the Senate Committee inquiry regarding serious concerns around the regulation of the Tasmanian forest industry, and improper industry practices, including destruction of wildlife habitats, and the burning and trashing of streams. Manning worked in the industry for 32 years for the Forestry Commission, FT and later the FPB. Employed as an FPO in 1990, Manning was the only enforcement officer in the FPB between 1990 and 1999 aside from the Chief FPO. Between 1999 and 2002 Manning was responsible for auditing of Forest Practices. In this four year period Manning alleged he reported nearly 100 separate serious breaches

of FT to the Chief FPO, yet FT was never prosecuted under the Forest Practices Act (Manning 2003). Manning claims his allegations of breaches were overridden by the FPB, and that his position and authority was stripped from him following issuing a section 41 notice 'on a plantation establishment site against [FT] for non-compliance with the Threatened Species Protection Act, the Forest Practices Act and the Environmental Management and Pollution Control Act' (14).

In December 2006 Justice Marshall in the Federal Court of Australia in the case Robert Brown v Forestry Tasmania found that FT's forest operations in the Wielangta Forest would most likely have significant cumulative effect on three endangered species (listed in the EPBC Act, as 'Priority Species' under the RFA); the Tasmanian wedge-tailed eagle, the broad-toothed stag beetle and the swift parrot. Section 38 of the EPBC Act 'in effect, exempts most forestry operations from the referral, assessment and approval requirements of the EPBC Act provided they are undertaken in accordance with a regional forest agreement' (Freehills 2007). At the time of judgement clause 68 of the RFA stated that;

The State agrees to protect Priority Species... through the CAR [comprehensive, adequate and representative] reserve system or by applying relevant management prescriptions.

Marshall found that both the CAR reserve system and management prescriptions under the Forest Practices Act did not sufficiently satisfy the obligation under clause 68 to protect the endangered species. The court gave an expansive interpretation of 'to protect' by reference to the EPBC Act stating that;

Protection is not delivered if one merely assists a species to survive. Protection is only effective if it not only helps a species to survive, but aids in its recovery to a level at which it may no longer be considered to be threatened (Para 264).

The court also found that these operations did not comply with clause 70 of the RFA which 'required Recovery Plans and Threat Abatement Plans to be prepared and implemented 'as a matter of priority' (Freehills 2007). Effectively findings by Marshall meant that FT's 'past and future forestry operations in the Wielangta forest could not rely upon the section 38 exemption as they were not carried out in accordance with the RFA by reference to clause 68' (Freehills 2007). This case and the resulting changes to legislation (Appendix 5) will be discussed in Chapter 3.

Baldwin and Cave (1999: 130) describe the predominant source of concern in relation to the forestry industry;

The public are not liable to trust self-regulators... or see them as legitimate if they are seen to be able to circumvent external controls, or to be more strongly accountable to their members than to the public or those affected by their activities.

Wilkinson (2007: 487) states that the 'efficacy of a regulatory system can not be judged solely from an analysis of breaches', but must look to the 'systematic monitoring of the standards that are being achieved'.

This chapter has demonstrated the primary ways in which environmental regulation occurs in the context of FT. The next section of this thesis seeks to move beyond this framework and look at what is *actually* occurring in relation to FT's environmental regulation.

Chapter 3 THE REALITY OF REGULATION

This chapter seeks to look beyond documented structures and systems and uncover the reality of regulation in practice. As noted previously, public mistrust of the system continues to exist – but why? Responses by some regulators point to misinformation & ill-founded accusations.

A lot of people in the public just aren't aware of the months and months and months of work that go into looking at all the aspects of what may or may not be affected by a given operation – that's a frustration sometimes – people just think that we just are cowboys that ride in and knock the forest down. There's an awful lot of environmental regulation and a lot of voluntary work, extra work that's done to get it right – so that can be a frustration – but I also think it's a good thing to have the scrutiny.

Such mistrust can place genuine strain on regulators.

[W]e do cop a lot of flak, and I feel that sometimes it's unfair because we've done a lot of training, we do think about what we do. There are other aspects that I think we could do better but generally I think most of the people that work in the industry are fairly thoughtful and intelligent and given the right direction we will actually do a really good job. You know the commitment level is there but without the support of the community it becomes very draining and very hard to keep going because you're hit on the head by your boss to do it one way and then you try to have a social life and you talk forestry and the next thing you know you're bailed up in the corner and you just want to get out. (FPO)

Such mistrust however may be justified when in practice environmental regulation may '[fail] to fulfil its theoretical promise' and instead '[serve] the industry rather than the public interest' (Gunningham et al (1998: 52).

[Public opinion] plays a very big role and I guess it's where I'm the most disappointed - because a lot of what people say about the way we do things, while they are misinformed in a lot of ways I feel essentially they're right. We tend to be an organisation that is like the Hydro of the past, where we think that we are bigger than what we actually are. We think that we are quite within our rights to do a lot of the things that we are doing and we don't see it as a community kind of thing. While we do consult the community and we do do special things here and there, overall as an organisation that's not how we operate. We operate as a corporate body and we are becoming more and more hard nosed about the business focus. It's that business focus that the public generally have the most problem with... the mainstream people are concerned that we don't actually care enough about the environment we don't care enough about the way we do things. We tend to be - we have' big boots', 'big machinery'. We do things on a big scale to make it economic and they don't generally like that approach (FPO)

The reality of regulation is not clear cut. To understand such, analysis must look to regulation in practice. This chapter focuses on the key issues identified regarding how environmental regulation occurs relating to FT. Information utilised was collected through interviews conducted with regulators (FPOs), senior managers in the areas of Planning (MP) and Environmental Coordination (EC) at FT, and the Chief FPO with the FPA, as well as through publicly available information including the Senate Inquiry where Bill Manning gave evidence on the Tasmanian forestry industry, and the recent High Court case Robert Brown v Forestry Tasmania. Information is discussed in relation to organisational, regulatory and political dimensions.

Organisational Dimensions

In reality the culture of the organisation and the system within which it is located has the ability to influence operations beyond written regulations.

In 2003 Bill Manning, a long serving employee of the industry (a senior forester, then FPO until 2002) described the culture of the system and the industry it encompassed as riddled by 'intimidation', 'deception'(16), and 'bullying'(11) of those who sought to speak out against it. Manning stated that the culture of the system created a situation where a number of regulators were too fearful to carryout appropriate regulation of their employers and the industry at large for concern of vilification.

Research undertaken with FPOs and senior managers at FT alternatively describes a culture embracing passion and pride throughout FT relating to the industry; the systems in place; and ability to carry out environmental regulation and achieve 'good' results.

According to the Chief FPO the FPA seeks to foster a positive culture through FPOs via encouragement, education and facilitation. This aims to move FPOs beyond working simply to minimum requirements of the FPC to 'wanting to do the right thing and being proud about what [they] are doing'. One FPO reflected such ethos viewing their responsibilities as extending beyond their designated area.

The question in reality is to what extent does the culture of the system and the organisation within such influence regulation in practice?

Economic Imperatives

The present research suggests a primary motivation for the implementation of environmental sustainability measures and the voluntary adoption of FT's EMS relates to economic imperatives.

10 years ago it was simple, the code is the bar and applies to all tenures – those who sign on to these voluntary certification schemes and try to actually go above that... why? Because they might have public perception problems, they might be losing access to markets, they are the two key drivers... ohhh and wanting to do a good job! [laughs] - That's probably the most motivating for staff (MP)

The philosophy adopted is seen as able to influence operations at an organisational, regulator and ground level operator level. One FPO illustrated that regulators and ground level managers may be motivated by different perspectives on what is required to conduct a 'good job'. The FPO stated that within his district the FPO responsible for roading viewed a 'good job' as building a solid road at minimal organisational cost - where special values were not seen as a main priority, but rather as 'airy fairy stuff'.

[A]s far as he is concerned we are complying and he is trying to get going efficiencies by costing the organisation the least amount of money to do that and actually ending up with a really good road.

Alternatively, the FPO noted that those responsible for harvesting in the district looked to find a balance between environmental and business goals. They sought to implement recommended environmental practices, utilising knowledge gained through FPA training courses, and having extensive contact with FPA specialists to try to attain 'good environmental outcomes' seen as required to achieve a 'good job'.

[T] hey are not trying to necessarily come up with the best harvesting area but the best compromise with all the special values that they have to take into consideration.

The perspective taken in terms of what amounts to a 'good job' ultimately will influence environmental outcomes. Environmental regulation would appear in reality to be greatly influenced by economic imperatives imposed by upper level management.

FPO: [M]y boss often has an idea on things which differs to mine.

So what I see as black and white on what we should or shouldn't do, my boss quite often sort of comes up with, what is it... it's a reason why we could do it differently - but I don't necessarily agree with that reason. So while I'm supposed to be responsible and controlling it, I don't really, it really much depends on the people above and how they interpret it.

Interviewer: In terms of the main areas where you and your boss might differ in how you would want to run things...?

FPO-I err on the side of caution a lot more. My boss is very much a lateral thinker and [he's] got a much more 'can do' attitude. The important thing from my boss is that we are actually doing the job that we are supposed to do and all these little hiccups - like eagles shouldn't actually get in the way of what we're doing. We should be able to manage around it. Whereas I tend to be much more black and white; that's the eagle zone we just don't disturb the eagle site during the breeding season. I guess it's because I've been with FT for a while and I don't necessarily have ownership of the direction FT's going in. I don't necessarily agree with the direction FT is going in, but whatever we do I like to try and make sure we meet the requirements of what we are governed by. In all honesty what tends to happen is that when money is involved, people want things to happen...

The conflicting philosophies of regulators and management can place pressure on regulators to compromise the environment in the wake of economic imperatives. Attention should look to the culture within which upper level management operate, and the ability of such to underpin decisions and the resulting pressures and constraints

imposed on those in lower positions who may operate under differing perspectives (see Haines 1997). Management influence regarding business and economic imperatives was noted as a real pressure able to compromise good environmental outcomes.

I guess the desire to have a good environmental outcome is being compromised by the desire to perform at a business level. Even though that's part of the business to do that, the fundamental driver of the business is dollars and markets. That's not the best way to get a good environmental outcome. Those on the ground know that, but more or less have got their hands tied. A lot of the approach on the ground has been: 'well in a perfect world this is what we would do but this isn't a perfect world, we have to make the best of a bad situation'. My concern is while we can never get to a perfect world, the best of a bad situation is only brought on by ourselves being overambitious in what we can achieve. I'm very conservative in my approach and that's why I sort of have issues with my boss. When my boss steps in and does the old 'well it would be nice if we could do this' I'm thinking straight up 'look it doesn't matter how nice that might sound, its just not going to work - what your asking is directly conflicting with the environmental outcome'. While it sounds good in theory, it's just never going to work. (FPO)

Managerial and business-based pressures facing FPOs may result in regulators hands being tied regarding environmental compromises. Gray and Scholz (1993: 177-178) note that 'the effectiveness of enforcement in achieving desirable goals has become much more open to question' due to 'problems of imperfect regulations and everyday enforcement activities by agencies operating within the legal, budgetary, and organisational constraints of public agencies'. Manning highlighted managerial influence as a significant concern in terms of environmental regulation.

The problem is that foresters have an extremely bad name in Tasmania—and rightly so—not because of individual forester's performance but

because of the direction that they have been forced to take, and that has come from the top down. (23)

In his evidence to the Senate Inquiry, Manning alleged via sources within FT, that senior managers had been paid bonuses to maximise logging areas and increase woodchip volume. No substantive evidence was provided to substantiate this (Tierney 2003). Despite this, there appears to be a strong case to suggest that the business approach adopted ultimately will influence the way in which regulation is, and can be conducted. In some cases this is to the determent of the environment.

[T]he approach that seems to be taken is look profit - you've got to be up here That's the whole basis of the FT plantation push - you need to be a world class kind of operation to be competitive in the world market. I say yeah you're right, but we are Tasmania, we are a small island It's going to come at a cost to be that competitive and that cost is going to be mostly the environment. Some people in the organisation just don't see it that way, but from my point of view if you look at the environment first, you come up with a completely different answer (FPO)

One FPO noted that whilst environmental regulation is accepted within FT there is 'a tension setup within the industry' in so far that 'someone is selling wood and keeping a contractor going and cutting it, and someone is planning operations and these two are sometimes at cross purposes' The reliance on the industry at multiple levels therefore can create a situation where according to the FPO 'part of our organisation lose sight of the fact that, you know... we are to be doing sustainable forestry that we can be doing in 90 years time'.

The influence of the business approach does not necessarily go to the extent that laws are broken, yet perhaps establishes an atmosphere in which the likelihood of such is increased, and where the system of management in reality may fall short of 'best practice'.

[Environmental regulation is] one of those sort of grey areas where if it suits the organisation to sort of be hard nosed on it, then we will. If it suits the organisation to not necessarily cheat the system but to do the least amount possible then we will also do that. We're a bit hot and cold on it sometimes. There are some things that we follow strictly to the letter and is done sort of at a pretty high level and then there are other things where it just sort of slips under the radar a bit and definitely could be done better, but is not necessarily not compliant. (FPO)

One FPO noted that the technology and ability to achieve good environmental outcomes on the ground exists, but at times was compromised when strategically things were decided on the basis of business outcomes. Therefore regardless of whether the FPS in place is 'good', business driven approaches can impede the achievement of 'good' environmental by utilising system flaws to their advantage.

[O]rganisations like FT and [name suppressed] are good at... I guess making the most out of those flaws and would argue that they are not doing anything actually wrong. They are actually adhering strictly to the guidelines that they are supposed to and they are having 'good' environmental outcomes - but from my perspective they are overlooking, particularly at the strategic level some important issues. If they were acting from a more moralistic view they would be doing it differently - but they are looking at it purely from a business view I think that's sadly where we run into trouble between what the public perceive we are doing and what we think the public should perceive us as doing... [F]rom a strategic perspective we try and do things too much like a business and it's the environment, not a business we are talking about.

It was noted that in some situations it may be a case of pennies driving procedure.

I think [the FT peer review process of FPPs] suffered somewhat during the last federal election. The Community Forest Agreement put new pressures on planning in that suddenly there was Federal money to convert underperforming areas of native forest plantation within a short period... [S]o what happened at that point a lot of work was taken up with getting these plans together before the end of last year. During that time I think we, at the planning level, the peer review process really suffered in that there was more people being spurred on to get these things done and there was less scrutiny than there should have been in that environment... Things like a sudden burst of millions of federal dollars to get a certain amount of things happening can change things especially when we are really under staffed.

Manning highlighted this concern relating to the introduction of the RFA.

[W]ith the incoming investment through the [RFA] and the money that flowed into the industry, the sustainability of the industry changed and the emphasis changed. It was all about volume: 'Get it out. We have a sale for it now. Put it into plantation. We have this money; we have to use it (21).

Regardless of the intricacy of laws and regulations in place, the ability of these to succeed in achieving sustainability may be compromised where the system as a whole is based on the inherent principles of resource consumption (see White in press). One FPO stated that this situation may be rectified if forestry were to amalgamate with a government department such as DPIW (Primary Industries and Water). The FPO however stated that FT would probably be adverse to this because;

[T] hey want to keep forestry simplified, and practical, and they want to have the decisions made by the people that are making the money, or losing the money... [T] he fact is that the people that are running the businesses I think are focused too much on making the money and building their business and not enough on the environmental outcome.

This business focus, via economic imperatives, has the ability to undermine environmental regulation in reality. Economic imperatives have the ability to shape practices on the ground, allowing compromises to be made in the name of 'good' business, where the expense is paid by the environment.

FPOs within FT operate as Dual Agents

The cost effectiveness of this self-regulation (SR) system is primarily achieved through industry regulators operating as dual agents. This is viewed as advantageous to both industry; providing the power to 'plan, implement and monitor its operations with minimal bureaucracy', and government; who receive 'at virtually no cost... a network of skilled and experienced officers' (Wilkinson 1999: 7). Industry self-funding is currently estimated to be \$7 million per annum (FPA 2006). Both FT and the FPA viewed industry employed FPOs as practical and cost effective, viewing government employed regulators as a duplication of what is already in place. The dual role of FT's FPOs was highlighted in terms of operational efficiency and industry cost effectiveness.

Under this dual role FT's FPOs must manage their responsibility in terms of their role as part of the FPA, but also as an employee for FT. In describing this dual role the Chief FPO stated FPOs 'by virtue of their employment by the industry are agents of the industry, then by virtue of them being trained and accredited under legislation become agents of the authority'. FPOs are accountable not only to their employer, but under the Forest Practices Act and the delegation given by the FPA, are required to 'obey any instruction given by the chief FPO'.

I tend to think of them as, they're not our employees but there's a very clear line of responsibilities where when they are acting as an FPO, they clearly see their responsibilities to the FPA.

The FPO role is not necessarily a full time role, as corresponding employment may involve unrelated tasks. FT views their FPOs roles as integrated 'wearing two hats at the same time' (EC). FT's Manager of Planning described their status as 'joint'.

[T]o a fair extent their instructions come from the FPA but it's certainly true that they are paid by FT, and they are FT employees. So their ownership is... they have got dual citizenship I think. (MP)

FT's FPOs discuss their role in terms of the 'hat' that they wear. For some both hats were worn at the same time:

We don't really differentiate what is our forest practice hat and what's our forestry hat. It all blends into one...[T]there isn't really any distinction between what is Forest Practices and what is [FT] responsibilities.

One FPO stated that their FPA hat may occasionally be hung-up, or kept 'close by' and not necessarily worn. Another stated accreditation as an FPO provided them with an identical second hat, commenting that his role and procedures had not actually changed since becoming an FPO. The weight of the FPA hat was noted by FPOs;

[E]ven though we work for FT, by law we are very very strongly bound to the FPA. [W]e have got two hats on. I'm a FPO, I work for the FPA as part of my role and if I don't live up to the expectations I get picked up in audit, or someone complains about the job – and I've done a terrible job about finding special values and treating the environment in the right way – I'll loose it.

Baldwin and Cave (1999; 98) state that capture may be fostered in situations where the regulator and regulated have sufficient identification with one another. Within E1 the regulator is also the regulated. This regulator must regulate fellow work colleges and others within the industry that they are employed within. Accordingly with this dual role comes an inherent conflict of interests via economic pressure and top down persuasion.

[T]hey do have a conflict of interests. [T]here's all this economic pressure on them that they have to stand up for what the requirements of the Act are (Chief FPO)

FT describes the role as eliciting a 'tension of interest' (MP). Gray and Scholz (1993) noted that regulators must compete with the multi-level forces that influence those regulated, including social, economic and political forces. The following extract from an FPO responsible for Eagle Management provides a clear illustration of the economic and top-down forces facing FPOs within their dual roles.

Last week we had an Eagle Management workshop and we got together and had a good... session on how things aren't going right and are looking at how to streamline our internal processes. One of the issues we've got is, while we are under this legislation we've got our forest practice hat and our FT hat. We have to seek advice from the specialists... [The specialist] says 'you can't do anything. You can't sneeze. You can't do anything during the breeding season around the eagle nests' and FT have gone 'well hang on a minute, we're managing the forests, we can't allow Threatened Species Section (TSS) to tell us exactly how to manage it. We need to comply with the regulations but we don't play. [The specialist] says game' where [The specialist] says and we have to do.' From our [FPO] perspective it's difficult because there is no clearly defined line. So what we've done is we've got together and look[ed] at the issues that we're coming across FT are now saying 'well of we will draw up some guidelines on how we manage this and we will actually draw the line in the sand of where the

regulatory authorities responsibilities starts and finishes and where our responsibilities starts and finishes'. I guess from our [FPO] point of view that is the thing that we need. Because what I've done in the past is I negotiate with [the specialist] 'look this is what we're trying to do, this is what we've got' and [the specialist] says 'well in this situation this is what you need to do', and I go 'well ok he's the expert, he should know' and we will take that advice on board and we will actually do it, and my boss is saying 'well why? What research has he got behind this' and I'm going well 'I don't care! He is the expert this is what he said' and my boss is going 'well I think differently' and I'm going well 'you're not the expert'. So that's where the conflict lies.

Manning (2003: 13) noted this inherent conflict of interests in his evidence to the Senate inquiry;

[FPOs] are often faced with a conflict of interest, as virtually all of them work for the commercial forest industry. There are between 150 and 170 [FPOs]. Only three work for the [FPB]. [FPOs] are not independent.

Manning stressed the compromised position FPOs are placed in owing to their dual agent status.

On enforcement, the fact that [FPOs] are so hopelessly compromised leads to [FPPs] that are drawn up to maximise the area of land to be logged and that ensure the maximum volume of woodchips. This is not in the interest of long-term, sustainable silviculture. It is important to stress the following glaring obstacle to best practice regulation: [FPOs] draw up and approve their own plans. This means that there is no independent assessment of the silvicultural merit of a proposal. (13)

FPOs within this dual role have responsibility to a number of differing people and bodies including those in charge of their area of employment, the district forest manager, the district SHE officer, and the Chief FPO. Multiple responsibilities may add further conflict to regulation. Despite acknowledgement of dual role status, FT's FPOs may only be renumerated for half of their functions, although responsible to two separate primary organisations. Discussions with FT's Human Resources department suggests that FT's FPOs do not receive a separate identified payment for this role. One FPO commented that he did not believe they were appropriately renumerated as an FPO within FT, where contracting FPOs for FT would be.

Interviewer: Out of interest do you get paid for taking on that role [as an FPO]?

FPO. No.

Interviewer: So that's a voluntary role ...?

FPO In a way yer... it's the way the system is in Tasmania and there are officers that work for not only FT, but for other harvesting companies...

Interviewer: So in terms of your work as a FPO within FT: you get paid as a Sales Coordinator for FT, but you don't receive any extra money for being a FPO?

FPO: No but if I sat down with the hierarchy here they would say 'yes we do pay you' that 'in our salary and we would expect that as part of your job'... that's what their argument would be

Interviewer: Where as if your were a contracted FPO... brought in to maybe do planning for FT during say the fire season, but you also do work for Gunns or whoever else, you would be getting paid as a FPO?

FPO Yep that's right

Unclear, limited, insufficient or non-existent remuneration of FPOs may reflect to FPOs, or rather be a reflection of FT's position on the perceived status and power of the FPO role within FT.

The dual role of FT's FPOs may serve to limit regulating powers. Industry is thought to have considerable influence over and 'potent means by which to manipulate' the regulatory process and indeed the way regulators can and will operate (Sinclair 1997: 545). Manning highlighted that regulator powers maybe limited by;

- The influence of intimidation on forestry regulators and regulation in practice
- · Fear of 'industry'/employer backlash
- · Overriding of FPO authority
- Stripping of FPO power/ 'repositioning' of FPOs

When Manning declared FT as having breached the FPC, his decision was overridden by the FPB (despite the fact that neither the FPB nor the district forester inspected the site in question). Manning had never previously issued notices against FT and '[w]ithin two weeks, the chief [FPO] had demanded my notice books withdrawn. My authority to lay complaints under the *Forest Practices Act* was withdrawn as well' (14).

FPO powers may be limited via 'proper legal and system processes' imposed by FT. One FPO discussed the legal limitations imposed on regulating.

[W]e can't necessarily talk directly to the person who is doing it [breaching the Act] We have to talk to the person who is overall responsible for that

operation. If that happens to be someone like Gunns we need to go through the proper channels because we can't direct their employees personally.

The FPO stated that this instruction would flow 'down from the top as a direction' rather than directly through the FPO. This was due to concerns of legal liability for actions requested. Another FPO discussed how the description of the FPO role had changed with particular reference to working with contractors.

[W]e are still, as the landowner, 'supervise'... well I can't use the word 'supervise' anymore – we would be 'liaising' on those operations. We can't tell someone what to do, we can only suggest alternatives now...

The FPO stated that FPO powers had not necessarily changed.

[T]he reality is you are the person responsible for the operation proceeding, or the person responsible that a controctor will report to and your responsible to the certifying FPO in the case that something has gone astray.

This FPO suggested FT management felt the need to change the language used to describe the role of FPOs due to 'a litigious environment developing'.

It was noted that at times FT's FPOs were required by upper level management to make compromises in terms of environmental practices, which ultimately impacted on their responsibilities.

[T] hey want the business to grow and they want us to be able to do this, that and the other. In reality it's not as simple as that. For it to happen there needs to be compromises, and some of those compromises I feel like I'm not prepared to make those decisions. Even when those decisions are made I'm still not necessarily comfortable with them because I keep getting told

'you're responsible for Eagle Management' and I look at the Eagle Management we're doing and I'm thinking to my mind we could be doing it better, but I don't have that ability to make it happen better. (FPO)

Given the dual roles of FT's FPOs, as employees of the business it was noted the final say on the way in which regulators were to operate was not necessarily decided by the regulator themselves, but guided by upper level management.

Interviewer: [T]he final say is done by someone above you who's coming from a different angle?

FPO A different angle, yeah.

The limiting of regulatory powers may not necessarily be restricted to in-house operations, but rather reflective of an overall perception of the regulatory agency by FT itself, where the end result is a limiting of FPA power.

I sympathise with the FPA on a lot of issues because a) they don't have the strategic perspective that FT has because they are a relatively small organisation. You have got to remember they used to be part of FT once and so they are very much the poor cousins and they have been sort of put aside out of the way to try to become more independent. Now when they actually start telling FT what to do, FT goes, 'who are you?', 'what are you doing telling us we can't do this and we can't do that?' I think that's where a number of the conflicts arise. Now once upon a time we were seen as managing things in a responsible manner and now the FPA is out there, at an arms length, we're trying to distance ourselves a bit and trying to not let them tell us what to do, but [the FPA] can't see or they don't have enough influence in what we actually do, so [the FPA] are frustrated because they can only deal with the day to day management stuff. They can't get really get into the nuts and bolts of the bigger scale stuff.

The influence and authority of the regulatory body is brought into question. In discussing FT's regulatory structure with the Manager of Planning he stated;

MP: I don't want to down play the FPA – but I think you'll see its part of... Its one of...

Interviewer It's part of a wider system?

MP: Exactly

It is appears that FT's FPOs, as dual agents are faced with a conflict of interests, having responsibilities to different players who in reality have conflicting primary objectives. Research suggests that at times FT's FPO's regulatory decisions and responsibilities are limited in the name of the business, and their employer, where their FT hat is required to be worn over and above their FPA hat.

Regulatory Dimensions

The system of regulation is described as premised on the philosophy of 'fixing the problem' through persuasion, education, and encouragement, as opposed to simply punishing for any harm caused. According to the Chief FPO most problems arise due to 'a deficiency in either knowledge or process' rather than deliberate action, thus solutions cannot be achieved by merely 'wielding the big stick'. Legal action is viewed 'as a last resort, symptomatic of a failure to achieve good implementation of the code by other means' (Wilkinson 2003: 3). However does such an approach result in a stifling of action to prevent/correct harm to the environment? Is the 'slap on the wrist' approach described by Manning reflective of Ayres and Braithwaite's 'benign big gun'? Manning stated he 'was accused of being heavy handed' despite 'serious environmental damage... being carried out on-site by Forestry Tasmania' (14). In theory the persuasion over punishment philosophy may be appealing, whilst in reality it may be limited in ability to achieve its objective.

System Rhetoric: 'working together'

The system of environmental regulation around FT was described as predominantly premised on 'working together'. This was expressed through language including;

Partnerships;

In Tasmania forest managers and scientists employed within the forestry sector work closely with experts from conservation agencies and research establishments... [T]he partnership between forester managers and scientists is mutually beneficial – forester managers improve their understanding of science and scientists improve their understanding of how to manage natural and cultural values in a practical and effective manner (Wilkinson 2003: 5).

Cooperation;

Threatened Species were becoming increasingly aware that the Swift Parrot, which had been thought not to dwell in wet blue gum forest, was actually occurring in the wet blue gum forest. There was this potential range extension, but no one had ever mapped wet blue gum forest. Nobody knew exactly how much of it there was. So we needed to work together quite a lot – the Threatened Species experts to let us know about the biology of the bird—so that sort of risk management approach, but we were able to put some pretty valuable information into the system. (FPO)

Communication;

The interesting thing about the [FPS] is that there are so many FPOs out there that if someone sort of gets it wrong somewhere, people will pick up on it straight away and the point will be made. It'll be raised with that person immediately, and if there is a problem it will be raised with the Forest Practices unit people. (FPO)

Trust;

[F]orestry moves slowly... [Y]ou don't need a FPO on site all the time...

[T]he contractors, or if its our own people... if they have a problem they are straight on the mobile phone or whatever they might ring up their supervisor. (FPO)

Support;

If you need some support then there's other people, and your own peers around that might have some expertise in certain fields. You can go seek their advice and get their support on a matter. (FPO)

Consultation;

So there are consultations... that's one of the advantages of the system. It's very integrated, and practical solutions are looked for... [A] lot of the operations are very cumplex and poor outcomes if you don't do things in certain ways and at certain times... [O]ften people who work within the job can see solutions, can see ways of dealing with things in a win-win way. (FPO)

Such language may in effect be seen as system rhetoric. The often quoted phrases 'beyond minimum compliance' and 'world's best practice' (see Lennon 2003; Wilkinson 2003) may also be viewed as a form of system rhetoric. The Chief FPO stated that in general industry players like to work 'beyond minimum compliance'. This is encouraged and formally recognised by certification schemes which seek to move operations beyond minimum compliance. Some FPOs noted that operations in their areas were conducted with the view that the *Forest Practice Act* and *Code* were minimums and efforts were sought to move beyond such.

[W]e look at the FPA and FPC as minimums – but we aspire to do better than that... Certainly that's reflected in a typical coupe area that may be 80 hectares, and we are required to set aside X amount of area for eagle nests we find Where best practices might dictate, 'well this and an adjacent gully that is obviously good habitat' as well should be set aside, would be a better result

Having stated this aspiration, the FPO noted that such practices were not always achievable, and may be objected to/rejected through the peer review process due to 'different tensions competing' relating to 'wood volumes [being] hard to come by these days'. This suggests that the nature of the business purpose can limit the ability to embrace 'beyond minimum' aspirations of environmental regulation.

The Chief FPO noted that industry adherence to the regulatory benchmark of 'beyond minimum compliance' does not occur across the board. Some players continue to view the law as 'there to set the standard, and that's all they have to do', only operating within minimum compliance boundaries. In 2003 Manning suggested that this could be seen across the whole industry.

The erosion of best practice has been compounded by the self-regulation of the industry which has been so ineffectual as to render it virtually nonexistent. This has meant that standards of forest practice have actually dropped markedly and the industry is in virtual regulatory free fall (12).

The question arises whether 'beyond minimum compliance' and 'world's best practice' declarations are simply rhetorical adherence to regulatory benchmarks, and correspondingly whether such statements are in effect somewhat hollow.

FT does have a social role, and in fact gee if we did something useful, we'd stick it in that report under 'social' It's all about getting a tick – (laughs) – I mean that sounds trivial, but... the AFS says that we have got to work with indigenous communities and you should, but in a commercial environment we say we would if we have time, but we haven't got time for that... (MP)

According to FT's Manager of Planning, there was a realisation that ISO 14001 and the EMS did not set a 'high standard of forestry', but rather provided 'good systems for delivering on what you say you want to deliver on'. This realisation and resulting discussions around Australia with the AFS lead to the recruitment of FT's external auditor (SAI Global), who was seen as able to assist aspiring operations 'beyond minimum compliance'.

Frustration was voiced by one FPO, who as a regulator was provided the tools and knowledge to 'care for the environment', yet in reality was not able to put this into practice to carry out his role. He stated that he was unable to achieve a satisfactory result

under his FPO hat, nor achieve a standard 'beyond minimum compliance' or to 'world's best practice'.

I'm supposed to care for the environment. That's my job. But when you get the training on how to care for the environment and then you're told well just don't worry about that, or just ignore that, or you can get around that by doing this, you go well what's the point of giving me responsibility and giving me the training and the understanding, and then tell me that I can't do it that way... if I didn't know how to look after the environment it wouldn't be as much of a concern because I would be blissfully ignorant of what chaos we are causing, but after actually going and doing the training and understanding you think well why bother with that if your not actually going to do it? And then FT gets the big accreditation stuff and stands right behind it. 'We're the world leaders in this, that and the other' and you're thinking yeah in theory we are, but in practice maybe we're not. (FPO)

For the reality of regulation to be uncovered focus must look beyond system rhetoric and understand the reality of corporate power and the role of those imposing such.

Complexity of the System

The complexity of the system regarding environmental regulation was a reoccurring theme throughout FPO interviews.

Forestry is far more complex than most people realise. There is a lot more detail gone into it than most people realise and it is very frustrating for people at times who work within the system to hear it over simplified. All the various sciences behind all the forestry. FT puts in a huge amount into research and locking in very good systems...[T]here's all this interpretation and background knowledge and then there is what's in the plan, and then

what's not in the plan, which is all the special values that backs it up.

There's this whole system that backs up what you see in the plan. (FPO)

One FPO noted that FT's peer review process of FPPs, although not required under the FPS, assisted overcoming issues relating to the complexity, and it's sheer size.

[W]e desperately need to get into this automated software... Because we have 700 key documents, which is great and they are all there, but we need a better document management system and a lot of automating some of these processes, because it is very big. (MP)

On a number of occasions the evolving nature of the system was discussed as illustrated by passage below.

[W]e have this very very tight regulatory system that we work under which is very effective... When you look at the extent to which the code has got now and the level of detail that it goes down to.... It really is very very complex. I mean for us to log a coupe now we end up with a file, I'm looking at one now, that's probably three inches thick, where all these various aspects are considered. It would be hard to see how you could ratchet it up a lot more, because it is actually under constant review... It's a steadily moving and constantly reviewed thing. (FPO)

According to Wilkinson (2007: 486) '[d]eficencies in management systems are the single most common cause of breaches, accounting for 35% of all breaches'. FPOs noted the complexity of the system at times negatively impacted on the practicality of operations at a ground level.

FPO: I think that [present laws and procedures relating to environmental issues] are fairly well right, they sometimes do tend to push a little bit outside what's practical...

Interviewer: So you sometimes feel that they are not necessarily practical?

FPO: Yer, there are times when that appears to be the case.

Interviewer: Can you give an example?...

It used to be a plan that was very short and sharp and to the point and could be easily understood by people that are implementing it in the field. The way the plans are now, they are tending to become very long winded..., very much focused on the legal side of things and missing the point of who is out there in the field implementing the plan. In some cases they have added confusion to people out there in the field and have created a situation where a part of the Act's has been breached — a condition has been breached. I think that's a good example of where we are stepping away from the practical side and more into the trying to meet the legal requirements...

Interviewer: ...at what stage do you reckon most confusion occurs?

FPO: It's at the point of having a document that you need to tease out the relevant parts and make sure that the people doing the operation understand clearly... what's involved in the plan. So it's at that briefing and follow-up monitoring.

In reality, the complexity of the system appears to create some degree of practical difficulty and confusion in terms of ground level application. In such cases the use of discretion can be seen as flowing on from the complexity of the system.

The implementation of environmental regulation relies heavily on the use of discretion. According to Baldwin and Cave (1999: 96) discretion may allow regulators 'to apply rules selectively so as to solve problems or to temper excessively restrictive bodies of legislation'. Ayres and Braithwaite (1992) however state that the use of wide discretion poses a risk of regulatory and regulator corruption and capture. When asked whether regulatory decisions come down to the discretion of the FPO, the Chief FPO replied;

The judgment of the FPO. That's something that we get a lot of feedback on. If we do get a complaint, or we pick it up in our audit and it hasn't been reported by an FPO... we'll ask the question 'why wasn't this reported?'... [W]e say to FPOs 'its much better that you knock on the door and report this to the principal than some kid in the playground dobs you in'. That's the way the world operates. This system is supposed to be transparent and accountable.

FPOs must use their discretion in terms of reporting suspected breaches outside their operations.

Chief FPO: I think if it's one of their operations, this is a balancing act for them. If they see something that they believe is not right, then I would expect that they would make enquiries within FT...But assuming they see something that clearly doesn't comply with the code, I would fully expect that that would be reported to us. They are told in their training and when they are appointed that 'this is your responsibility, you have a responsibility to make these reports to the FPA'. If we found that someone had not acted on that information, we would regard that as a dereliction of their duty.

Interviewer: Even when they are not acting...

Chief FPO: It doesn't matter if it's their operation. It's a bit different if they're driving down the road and they see some private property over in the distance, and they look at it and think 'geeze that doesn't look right', but even then its not their responsibility to go and check it out – its got nothing to do with them. But even then I would expect that they would ring and what they will do, they will tend to ring up here and talk to one of my advisors...that's the way it kinda works

Wilkinson (1999) suggests that logically the use of discretion is applied responsibly by FPOs.

The often-quoted criticism of self-regulation is that it is akin to having the fox in charge of the chicken house (Gasser 1996). This is unfair if one assumes that a modern enlightened fox would rather sustainably manage the chickens than eat himself out of house and home (3).

Yet as highlighted by one FPO, hand-in-hand with the use of discretion comes the concern of acting beyond rules and regulations.

[C]ertainly with the Forest Practices Act if we've got some issues we normally ring up the FPA and talk to someone like [the Forest Practices Advisor] and [he] will give us guidance on what we should or shouldn't do. And look about 3 weeks ago I talked to [the Forest Practices Advisor] and I said look we've got a plantation that has failed and it doesn't have an FPP covering it at the moment and we were wondering whether we need to do another FPP to actually replant the area. What [he] said was 'technically under the act 'yes' you should but you know I think that it would be fair and reasonable for me to say that 'no' you don't need to. In this case you just need to apply what was there in the original FPP and make sure that your standards adhere to what was in that FPP...

Note that FT also has discretion over their external auditor. When asked whether the choice of auditor was decided by Government, FT's Manager of Planning replied:

No no arr I guess that JASANZ said that these companies are available to do the auditing, 'we accredit them'. It started off with only 1, so we might have got the first. Now there are 3 – if we found that our auditor was displeasing us. not so much so... but if they were slow to conduct their audits or um... we'd look around for another company.

Information availability may require the use of discretion on the part of the FPO and FPA as discussed by one FPO;

We went through a very difficult period post Wiclangta from a flora and fauna point of view. There wasn't a great deal of clarity about how we should be managing some of these species. So a lot of the approaches were very very vague. The prescribed approach was 'seek advice from the FPA', but the FPA didn't really have any great guidelines guiding their advice giving and nor did Threatened Species. So we tended to interact with each other a lot and discuss... Try to learn from each other what we could do to come up with a viable and a useful solution to the individual questions... We really had to do that on a case-by-case basis — so we were doing it very frequently.

Given the complexity of the system, increasing knowledge through education is viewed as a vital to the success of this regulatory approach in terms of decisions made and discretion used.

[A] well-trained and motivated workforce is an essential ingredient of any [FPS]. Self-regulatory systems, in particular, require that responsibilities be clearly recognised and appropriate expertise and skills be available to deliver acceptable standards (Wilkinson 1999: 7).

One FPO viewed education as producing a 'better result' by 'making people aware and getting them to try to do the right thing' as opposed 'a purely regulatory approach of whips and punishments'. In line with the emphasis on education and combating the complexity of the system, is the devolution of skills to FPOs and field staff. In some situations this may mean that regulators take a 'back seat' in the process.

[FT's Safety Health and Environment Officers] aren't policemen on their colleagues. They're saying 'come to me when you need to know the procedure, I'll teach you', 'come to me when you've spotted an incident that needs fixing and I'll raise a CAR'. 'I'm not going to be standing at your shoulder saying. "you directed the contractor to do that, but he should have done that" (MP).

One FPO suggested that the reasoning for the devolution of skills was on reducing the workload of FPA specialists, 'allowing the people in the field to become more responsible for what they do' via specialists passing on 'knowledge and ideas and... [saying] in this situation this is what you should be looking for'. Given the complexity and size of the system within which they must operate, FPOs are not capable of becoming experts in all relevant areas relating to regulation.

[U]ltimately the sort of courses and those sort of qualifications probably don't mean much on their own, but what it does do is it gives the specialist the confidence that the people out in the field do have a bit of idea on what they're doing and they can rely on what they're saying (FPO)

The importance of ongoing hands-on training (over the provision of written information alone) was highlighted given the dynamic setting within which environmental regulation occurs.

[O]ne needs to be brought up to speed. I am not a great fan of just sending out a notice. I think it's better to have a bit of a get-together as a group and

then having someone talk about 'these are the changes and the different ways of interpreting things' ..., than to get bombarded with one of these notices. I reckon I'm like a lot of others who tend to just get [the notice], print it, put it in a file, and sometime down the track grab hold of it and relook at it ... (FPO).

It was stated that training needs to occur on every level throughout the industry, from ground level operators to upper level management.

FPO:

...I think that's probably the key: having competent people that are switched on to know what's happening and are able to act properly and know when to act when things are not right...

Interviewer: ...[I]s that on a specific level? Throughout the industry? Or

throughout just your area?

FPO:

I would probably say through out the industry.

Interviewer: At every level?...

FPO:

I suppose I'm thinking of the ground level. The people that are actually there either doing the job, or monitoring the job. I think at probably the higher level they probably would be worthy of some people being more aware of what does go on out there They probably tend to look more at the dollars and cents then the environment... More awareness of what's going... the importance of it.

This was reiterated by another FPO who suggested that upper level management perhaps were 'unaware' of what regulators were required to do to adequately carry out their role.

One FPO suggested that improvements to the current system should look to provide training to the people actually implementing FPPs to provide those physically doing the job with 'better' forest practice skills. According to the FPO, current ground level implementers of FPPs receive 'some training' when they obtain their operators ticket through TAFE, but such training was not seen as 'significantly in detail'.

Both FPOs and management at FT noted the need and importance of extending training to contractors.

That's a big issue. Our external auditor has been rightly saying, 'the people that do work for you need a briefing on anything that they do which is relevant to your environmental outcomes'. For a while we weren't doing enough of that... [W]e have our own staff organised, but we'd be getting in Joe Blow to do a spraying operation and we haven't done sufficient handover of... 'these are all the things that we expect, some of them are beyond legislation, these are all our procedures and your working on our land so the deal is you work to these arrangements' (MP)

[C]ertainly quite often it's a third party, somebody else working on state forest who cause the incident. So I see my role there as, to make sure they follow the requirements of the Department of Environment (FPO).

For one FPO, their role entailed going around operations and reinforcing key elements, changes to, and interpretation of the FPC predominantly 'at the coal face' with contractors.

All FPOs discussed the breadth of training offered and undertaken by FPOs through the FPA. In terms of staff 'training' offered by FT, FPOs responses ranged from 'pretty good' to somewhat limited relating to finance.

One FPO discussed concern about the unbalanced allocation of resources and training. Focus tended to be placed on 'sexy species', meaning that species not necessarily to the fore of public debate and concern can in fact be overlooked.

[W]e're doing this, this, and this and chipping away at this little bit, and we have done it right here—but what about all these things happening all at the same time? While we are focusing on... everyone in the state... on Eucalyptus Regnen's and tall trees in the Styx Valley, what about all of the highland forests? Is anyone looking into the conservation of those species?

Education and training needs to be far reaching in both scope and application to allow discretion to be utilised appropriately given the complex nature of this system of regulation.

Political Dimensions

Politics plays a significant role in this system of regulation fundamentally because it continues to intersect this framework in numerous ways at multiple levels. Industry and government have a long running history of overlapping (see Hunter 2007; & Brown 2003) most recently illustrated by the Premier, Paul Lennon's appointment of FT's previous Managing Director, Evan Rolley as the Head of Tasmania's Department of Premier and Cabinet. The industry itself continues to receive support from both Liberal and Labor parties in Tasmania and across Bass Strait, with particularly strong support and endorsement provided by previous and present Tasmanian Premier's. The present Premier also has Forests under his portfolio. In the game of politics full unreserved commitment to the environment appears questionable.

Role of Government

Both the State and Federal Government in reality play a significant role in terms of shaping environmental regulation. The Chief FPO described the relationship between the FPA and government as operating at 'arms length'.

[T]he day-to-day business is done by the company and the government role is just to monitor standards and make sure they comply...

As an independent statutory authority we advise the Minister on our functions under the Act and that's it. The Minister cannot direct us. That's important. So we are independent, at arms length from government. The Minister cannot direct us not to pursue an investigation, or to pursue one that we think is not justified... It's a really important part of being a regulator that you have to not be influenced by Minister's sensitivities.

Despite being positioned at arms length from the FPA, it appears that the Government does have some sort of role within the forestry industry. Government support has been a reoccurring theme in Tasmania's forestry history (see Gee 2001; Flanagan 2007). State support via 'grants, income tax loopholes, corporate infrastructure, transportation, 'forgivable loans' or changes in legislation is often viewed as necessary to keep industry investment, jobs and profit in the state. States are 'wary of offending capital' due to their lack of direct control, and its fluid nature (Snider 1991; 214).

The Tasmanian Government has not been shy in interfering in order to aid the industry. In 2003 then Deputy Premier and Minister for Economic Development, Energy and Resources, Paul Lennon, wrote to the Senate committee stating that the FPB were unable to assist the committee regarding evidence of alleged breaches under the FPC produced by Manning, despite the FPA's Chief FPO having 'offered to appear before the committee and respond to questions' (Murphy J cited in Tierney 2003). Instead Lennon attacked Manning's evidence for an hour under parliamentary privilege stating such claims were 'unsubstantiated allegations, misrepresentations and distortions', whilst others were 'total fabrications without any conceivable basis or evidence' (Lennon 2003: 32). Lennon admitted to breaches occurring but dismissed such as trivial and 'minor'.

I am not here today to claim that breaches never occur in our code of practice, they do. But the majority of breaches would be regarded as minor by any reasonable, independent assessment and could be put down to deficiencies in planning or training (31)

In February 2007, Lennon (as Premier of Tasmania) alongside the Prime Minister of Australia, John Howard assisted Tasmania's forest industry by signing off on amendments to the RFA with the deliberate result of nullifying the Federal Court decision in *Robert Brown v Forestry Tasmania* regarding environmental impacts of FT's operations.

Tasmania continues to see what Snider (1991: 215) describes as a 'state timidity to pass and state reluctance to enforce laws penalising corporations' as such 'potentially endanger accumulation'. There is a situation where '[1]he state appears to be paralysed' (225), where environmental harm can be down played, or ignored altogether as a result of current governmental values.

At the moment we arr have been part of a pretty good political environment, where our illustrious leader of the State is somewhat pro-forestry. That sort of provides the backbone of forestry to thrive and develop. It probably does come at a bit of a cost in some aspects of environmental management. When the government changes, some of that legislation may change. (FPO)

The government appears to have played a significant role in silencing Manning. Lennon accused Manning of failing 'to follow proper process with respect to [alleging scrious breaches of the law]' (Lennon 2003: 32). According to Manning however, when he tried to speak out against the forest industry and its regulation, he was shuffled from one person to the next within government. Initially approaching the Attorney General, Peter Patmore, Manning was told to hold off making his allegations public as Patmore indicated 'that the government would eat [him] alive' without the protection of a new public disclosure act (at that time was being introduced by Patmore). Six months later Patmore resigned, passing Manning's issues to the Secretary of the Department of Infrastructure, Energy and Resources, Mark Addis, who was responsible for forestry issues including the FPA.

The close links between government and the forestry industry are not hidden. The Premier of Tasmania, who himself historically has been linked with the industry, is an upfront supporter of the industry, undeterred by concerns of his compromising position (see Schofield 2007; Flanagan 2007). Lennon appears frustrated by continuing calls for inquiries into the industry, given the level of scrutiny currently in place and already undergone in the last 27 years (Fullerton 2004b). Despite ongoing inspection, public inquiries are still being called for. Nicknamed the 'Gunnernment' (Flanagan 2007) from

'Gunnsmania' (Schofield 2007) due to the interconnections between government and key industry players, concern continues to rest in government ability to achieve arms length status from this SR system. According to Fullerton (2004b) this relates largely to both the current 'political climate where both Liberal and Labor parties are pro-forestry' and the 'power, money and might behind' the system itself.

In 2003 Manning alleged that FPB audit results were required to reflect favourably on FT due to its direct links to government.

Compounding this biased system is the inherent lack of integrity within the culture of the [FPB]. An example of this was seen when I audited the Murchison and Bass districts in 1999 and 2000. My results reflected very badly on [FT] and were altered under the instruction of the Chief [FPO] to reflect better on the Government Business Enterprise. [FT] was not to be embarrassed by an accurate report of the [FPB] to the parliament and people of Tasmania, as I was instructed. (14-15)

The FPA's audit system was criticised by Manning regarding 'no negative weighting for environmental damage'. Manning described the audit system as 'fraudulent' and 'misleading' as an audit rating of 90% could be maintained despite a company causing significant environmental damage in one area, 'as long as the [FPP] was clear in other areas' (15).

For years there was not even a question in the audit whether or not the plan was breached. When you consider that the Act was introduced in 1985 and the first code was introduced in 1987, and we have had 18 years of that operation, Forestry Tasmania having never committed an offence in 18 years is bullshit (32).

Audits are conducted after the site is logged, rather than while operations are in progress. According to Wilkinson (2006:1680) 'to get enough observations in practice we try and

audit plans that are nearing completion or else you just don't have enough audit information'. Manning stated that the then FPB and industry had control over its audit system. It was designed by the FPAC, who were answerable to the then FPB, and was conducted by 'compromised, industry friendly [FPOs] who have no qualifications in environmental auditing'(16).

Wilkinson's (2007: 480) analysis of forest practices between 2000 and 2006 in Tasmania, shows that breaches were 'reported in less than 6% of forestry operations', stating that serious breaches were 'infrequent, occurring in less than 1% of operations' with 85% 'caused by errors or deficiencies in knowledge or management' and '15% of a deliberate nature'. Harm to the environment does not necessarily amount to a breach under the FPS in place.

The [FPC] is simply a set of guidelines and is an unenforceable document with no legal standing. The guidelines become legally enforceable only when they are specifically stated in a [FPP], which has to be drawn up and approved by a qualified [FPO] (Manning 2003: 13).

Under the guise of persuasion over punishment, in some instances where breaches occur, there may be no formal repercussions. In 2003 Manning stated;

When the community complains about any breaches of code, nothing happens. This is my experience working within the system. The [FPB] may inspect the coupe, but no prosecutions occur. No action is taken other than maybe a slap on the wrist (13).

Manning stated that in some instances, environmental harm, such as the clearing and planting through of streamside reserves was permitted as 'contractors are often directed to do this or allowed to do so in the full knowledge that there will be no repercussions' (12). Despite processes in place to prevent environmental harm, such can still occur

where systems are ignored, overlooked or not understood. This was highlighted as an issue within ground level operations.

Ok so there is a supervisor that would be assigned to that operation from our side of it, from FT, and they would give the operation a briefing. Then there is monitoring that goes on. Throughout that monitoring if there are issues that people at the ground are wanting to discuss, then they can discuss it in that avenue, or contact anyone at anytime, well any supervisor. They can contact their supervisor at anytime basically to get some clarification... The problem tends to be that they don't tend to do that. They tend to go along with what they think is right and then you tend to have, may have a problem. (FPO)

Mistakes in planning can also lead to environmental harm.

[A] good example of something shooting up to the top is, unfortunately we logged part of a reserve in the Huon, the Huon Forest Reserve. Very unfortunate. Pretty serious, quiet distressing for all those involved, including the FPO who was an excellent bloke, who well felt responsible, who I guess was ultimately responsible for the mistake. It was very much an honest mistake by someone who has a very good record. (MP)

Where proper processes have been followed environmental harm can still occur through natural 'uncontrollable' situations.

You can have these situations where you have done everything under law and then the changed circumstances change the rating of the level of the stream... You can do everything in good faith, and have natural events that change things and that's constant... [Y]ou can get really frustrated by things like that at times...[Y]ou have a breach and you are required to report it. (FPO)

Preventative action was identified as a key to the success of implementing environmental regulation.

Getting the planning right far enough in advance, having the resources to do the planning well and properly. If I can do that I can minimise the amount of regulation that's actually needed by getting things to work well from the start. The stuff up never happens and then regulation is never needed (FPO)

Current laws set in place by the government can regulate for the continuance of serious environmental harm at the hands of the forest industry.

[P]eople would report to us breaches of the FPC, and we would go out there and look at it and say 'no they are not breaches of the code, this is quite legitimate'. Then they would stand there and say 'well that's outrageous, how can you possibly allow that to happen? These are old growth trees and they have been cut down, that's outrageous'. It would put us in a difficult position, because we were sort of saying 'well look the policies of the government allow this to happen. Government have decided that there will be a forest industry and they've created those rules and we have to regulate against those rules' We can't change those rules... whether we think that is good or bad is not something we can put on the table officially, because the government rules are that this can take place. We just have to make sure that they comply with the rules. So there can be distrust of the regulatory process, which actually hides the fact that some people don't like the government's rules. You need to separate out the two...If it gets confused by not wanting trees cut down, then it's really hard to do our job better, because the government allows trees to be cut down. (Chief FPO)

[S]ome people misunderstand the code and make claims that they don't have to substantiate. On the surface that claim may look reasonable, taken within the context of the code It's unreasonable. (FPO)

In this way, it appears that the industry's defence for committing harm to the environment is that they follow the relevant rules, regulations and laws. This defence however did not sit well with one FPO when discussing the 'ownership' of decisions relating to environmental harm.

[T]he way I deal with it is if it's my decision then I own it, and if it's not my decision then they own it. It's got me into a bit of trouble, but I'm happy with that in a way, because I don't want to personally be responsible for... I just don't want to retire and then find out that all of the work that we've been doing, and where we thought we were doing a good job, and where we were striving to do this, was all just rubbish and that we were all environmental vandals. Especially knowing what we actually know and making compromises in things that we actually know now, and we are going to learn as we go. In 20 years time what we are doing now will seem harbaric in the same sense that what was done 20 years ago seems harbaric I definitely don't want to be in that group of people that are directly responsible for doing environmental vandalism. (FPO)

Laws have also been changed which allow the continuance of environmental harm where the reasoning for such relates to costs of production, profits and industry security (seen as directly tied to job security). In 2004 the then managing director of FT stated 'no harvesting occurs where there are endangered species' (Fullerton 2004). In 2007 following the 2006 Federal Court decision in Robert Brown v Forestry Tasmania, the State and Federal Governments allowed changes to the Tasmanian RFA. These effectively nullified the courts decision seeking to protect three endangered species from the operations of FT in the Wielangta Forest (see Appendix 5). The Australian Minister for Forestry and Conservation, Senator Eric Abetz, stated that these amendments 'will

restore the policy intent of the RFA, and will continue to provide certainty to the forest industry in Tasmania while maintaining the protection of rare and threatened species' (2007). Yet two months earlier Justice Marshall, after having heard countless submissions from independent experts, stated that were the operations in Wielangta to continue, these endangered species would be placed at unacceptable risk. Abetz's media statement detailed that the aim of the RFA was to 'conserve Tasmania's forest biodiversity and other forest ecosystems while ensuring a viable and sustainable forest industry'. Commentators on these changes suggest they will effectively 'enshrine in law the destruction of threatened species habitat' (Paine 2007: 9) and highlight the mentality of 'one law for the loggers and another for everybody else' (Wilderness Society cited in Neales 2007: 3). The ability to manipulate and modify environmental regulation to suit the priorities of the government of the day can result in such legal victories presenting as somewhat hollow due to 'the power to rewrite the offending legislation' (Snider 1991: 226).

Concern was noted by Manning over the ease and ability to alter certified FPPs to coverup breaches. In most cases only the front cover of the FPP is sent to the FPA, with the full FPP remaining with those in charge of operations. In one instance Manning was instructed to refrain from issuing a notice and instead give the green light for industry amendments.

There is that note on the file where the Chief [FPO] says: "Instruct Bill not to issue notices. Instruct the district forester to amend the plan to allow the breach." (35)

This alteration practice was conceded to by the government (Lennon 2003: 34).

Mr LENNON The board is aware that alterations may have occasionally been made in good faith to clarify or correct planning errors; for example, where a [FPO] has omitted to provide

for sufficient landings in the plan, and has retrospectively approved an additional landing after field inspection -

Ms Putt Or where someone's logged where they shouldn't have and it gets fixed up to make it look like it was all right.

Mr LENNON however, this practice is highly discouraged by the board...

Discussions with one FPO suggested that given the level of scrutiny around the industry, the 'many eyes watching any given operation' and 'audits from different angles', there was little sense in trying to cut corners as such would come 'unstuck'. Correspondingly another FPO felt that increasing regulations were actually an issue in itself. The FPO believed that there was a tendency for individuals to take less responsibility for outcomes, with reliance being placed on upper level directions. The end result tended to lead to compromising good environmental practices.

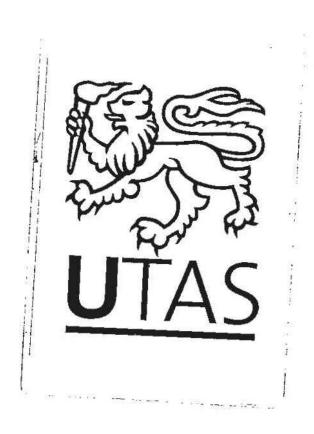
[T]o me it flows from the decision makers wanting to have an outcome and telling people 'you will deliver on this' The people on the ground know that they can't deliver without compromising. They're going 'well we've been told to deliver, we will deliver the best we can and those compromises that we make on the way, well they are just sacrifices for the bigger cause'. To my mind... there are some things where you shouldn't be compromising on. There are some things that you should draw the line, and say 'I know you said that we have to deliver on this, but we can't physically deliver and be responsible managers at the same time'.

In discussing current regulations, one FPO voiced concern over their ability to protect the environment into the future.

I think what's there is pretty good, you know it has to be sort of fine tuned, but in terms of... you have to look at results, not just that we are doing this,

this, and this Are the 10 hectares that we have put around an eagle nest effective? In terms of conservation of a species, well that's a pretty big question to ask! I would hope so, and there are on going projects that are answering those questions. I think for the most part... we are doing quite well. I think the scale of the industry in Tasmania, given it's such a small land base, it's inevitable that it will have to shrink. Otherwise no form of regulation in the present form is going to hold onto what habitat is required to keep certain species from becoming extinct

Given that the current regulatory structure is imposed, regulated, and to a degree funded by Government – 'arms length' statements of government influence are questionable given the system in place continues to reflect and be manipulated to represent current government values.



According to Wilkinson (1999: 3) 'the most important element for the credibility of any system is to have systematic and transparent reporting of results with respect to monitoring and compliance'. Likewise, the more open the doors of a system, the greater the likelihood less is hidden, and the increased likelihood of public trust and support in the system. The importance of accurate public knowledge of the working system was highlight by FPOs.

I think it's important that it becomes public exactly what does go on behind FT's doors and the industry's doors so that a) people can gain a better understanding and an appreciation of what we actually do do, and [b)] that the people that make the decisions can be made nore accounted for. In the sense that if they are taking a very 'business' approach and the people are happy, the community is happy for them to do that, well, well and good..

FPOs noted that community consultation was thought to play an important part in gaining pubic trust.

It's a bit of a tricky one, because you don't want every Tom, Dick and Harry telling us how to do forestry, but what you probably want [is] a consultative committee. Where the industry in general is able to get ideas passed to and fro from the general community on how they see they want the forests managed, particularly in their area While [the community] wouldn't necessarily get exactly what they want, you could go through a much more thoughtful and careful process, being sensitive to the needs of the individual communities that are effected the most (FPO)

The benefits of consultation however will not be achieved where such takes place in a 'closed' capacity. One FPO stated consultation must be inclusive, reaching beyond issues of politicisation, to engage those at a community level.

I think the community consultation is good as long as its not... I think what happened – there is such a polarization here... [Y]ou have this one lobby group, and you have this industry lobby group and they are all saying the same sort of things. In the mean time I think the average people in the community have been kind of left out of it. The people that are actually interested in what's going on, it's politicised. There is a lot of political brownie point scoring going on, and it is frustrating not to see the actual issues discussed the way they could be...

In mid 2007 FT's Managing Director, Bob Gordon, acknowledged FT's somewhat closed appearance, accepting that 'the bitter forestry debate had bruised the organisation, which appeared secretive'. Gordon promised 'a more transparent and sharing organisation, which would try harder to engage the community' (Duncan 2007: 7). Wilkinson (2007: 486) suggests that 'forest managers and regulators have a role to play' in educating and providing information about the regulatory framework to the public. Wilkinson highlights the importance of the investigation process being 'transparent and credible' to allow the public and media 'to have confidence in the outcomes determined for alleged breaches'. The importance of providing information to the community to gain an accurate understanding was reiterated by one FPO.

There are certain things that we do that people don't like that from a technical point of view we need to do... but its those sorts of things that the community needs to understand and be comfortable with the decisions we're making, because I don't want to have my kids grow up and maybe go to university and turn around and say 'dad, what you've been doing for the past 30 years is just rubbish, you're a criminal you are!' I mean chances are, they might or might not do that without having the knowledge, but if I don't act moralistically now then chances are of them saying that I'm an environmental vandal is pretty high. (FPO)

The limiting of information to the public can be seen as justified by FT on the basis of a number of reasons. FT was previously exempt from the *Freedom of Information Act*. When asked the reason, it was explained that FT had been finding it difficult to satisfy public requests for information as time taken impinged on FT employee's primary duties. Other justifications include:

Inability of the public to understand information;

Interviewer: So are the public able to access the full [SAI Audit] report?

Or is that...

MP: No not the full report—but I think you'll see when you read those... that most of them probably wouldn't want to... it starts getting very... Well we've said to our auditor we think that a lot of this is very technical and not understandable to the public, and they've have said 'well no, we want it to be pretty full and thorough and if they can't follow some of it that's not as bad as putting something that's blab and short'...there's enough there for most people to say ok I know where this is going and unless I really want to know a whole lot about chemical handling procedures or something I probably don't want to go through that.

And commercial confidence;

Interviewer: Is the SEMS, your EMS, is that publicly available for people to look at?

EC: Its basically our own - there is a lot of in-commercial confidence stuff in there, like some of our seed stuff and other bits and pieces - so a lot of our documents are all

confidential, some of our policies are publicly available - but generally our system is confidential.

Interviewer: For business?

EC.

Yer, we have put in a lot of effort - it costs us a fortune too ... [T]o just pass that onto someone else we lose that value.

When going through FT to access their FPOs for interviews, it was interesting to note the boundary maintenance and gate keeping that occurred within the system. Prior to being granted access, conversations were required with a number of FT personnel to both justify the research and to illustrate an appropriate understanding of the system. Such discussions proved very valuable despite the time taken. It should also be noted the openness with which FT conducted themselves. Coming out of this consultation period the high likelihood few FT FPOs would be willing to participate was noted. FT's Manager of Planning stated that in the past researchers had found it difficult to recruit participants due to participants concerns about information gathered/presented. Some what reflective of this was the 11% response from FPOs notified about the research.

The closed nature of this system is highly reflected in the interconnections between industry players and even more so in terms of government, industry and regulatory relations. Take for example FT's current Managing Director, Bob Gordon who was appointed Executive Director of the Government Pulp Mill Task Force in 2005 to assess to suitability of Gunns Limited's Tamar Valley proposal, or Hans Drielsma, FT's Executive General Manager, who is also a board member of the global certification scheme PEFC under which FT is certified. Drielsma's previous positions also include Chair of the AFS Steering Committee (established to develop the AFS), and membership to the FPAC (PECF 2007).

Manning saw such interbreeding as related to decreasing standards in forest management.

I have witnessed the most appalling deterioration in management of Tasmania's forests, especially state owned forests. This has been driven by the forest industry's professional foresters through their total dominance of representation on the [FPB] and the [FPAC]. This domination of the regulatory bodies has led to the [FPB] being simply a rubber stamp to be used by industry and government and for it to be doubly abused as the mouthpiece for defending the most appalling forest practices (11).

According to Manning;

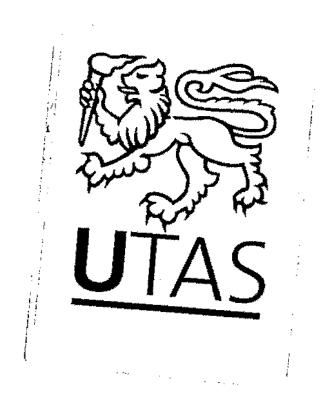
[T]he [FPB] is not independent of the forest industry but rather is hopelessly compromised by being dominated by members of the industry and that it fails to enforce the provisions of the [FPP], code and Act itself. Instead it delivers what the industry wants, which is the wholesale clear-felling of native forests for conversion to plantation. (14)

The close fusion of industry and regulator ties was starkly illustrated in the make up of the FPA audit committees in 2004/5, consisting of current senior figures from both private and public forestry. Manning felt that independent assessments were stifled for the reason 'that the forest industry has its people on just about every board or head of agency and controls the direction—even to the Department of Primary Industries, Water and Environment' (22). Manning stated;

[P]eople are not able to express themselves freely. They cannot give independent assessments. The control over them is extremely severe.

According to Manning, following issue of a section 41 notice on FT, his power was stripped by the FPB chairman, Ken Fulton, who at that time was also the Executive Director of FT. In July 2005 the FPB under went fairly significant changes, one of which introduced significant gains in the area of independence, replacing a number of industry board members with independent experts.

Such gains must be put into perspective given the long running history of this closed system. Its doors are held shut not only by those within the system (who have access to areas behind this door), but also by the politics shaping this very system.



Chapter 4

CONCLUSION: future directions

The key aim of this thesis has sought to describe the system of regulation in place around

FT relating to the environment and consequently how such regulation is applied in

practice. This research suggests in reality the nature and application of environmental

regulation around FT elicits a number of tensions. Conceptually these raise a number of

issues in relation to regulatory literature.

'Regulatory capture' is limited in application as regulators themselves are industry

players. Capture never conspires. The situation set up goes beyond the notion of

'capture'. From the outset regulators identify with and hold the identity of those they seek

to regulate. The reality is as dual agents FPOs are prone to industry influence because

they are embedded in the business.

The key tension relates to economic imperatives, most notably the ability of such to

transcend regulatory boundaries via top down pressure, managerial influence and industry

goals imposed on FPOs. The inherent conflict of interests that FPOs face as both

regulator and regulated may result in the 'regulator role' taking a back seat in the name of

business where confusion arises over which responsibility takes precedence. Working

within a system based on underlying principles of resource consumption, the reality is

economic imperatives impressed on FPOs may indeed result in compromises being made

to environmental regulation and practice despite capacity at a ground level to achieve

sound environmental results.

The risk of capture may be limited by voluntary adoption of external checks and

balances, yet these remain intertwined with industry. For example;

Regulatory Agency (Forest Practices Authority):

o designed by industry

95

- o regulates according to industry defined standards
- history of industry interconnections and degree of government involvement
- Forestry Tasmania's Executive General Manager previously on steering committee designing Australian Forestry Standard
- External Auditor (SAI Global)
 - o audits to standards defined by industry
 - information to suggest the auditor previously and technical experts currently from within 'the industry' on mainland Australia
- Forestry Tasmania's Executive General Manager is a Director on the board of the global certification scheme PEFC which recognises Forestry Tasmania's certification standards

According to Ayres and Braithwaite (1992) and Gunningham et al (1998) to counterbalance the risk of 'capture' independent non-industry third parties are required as partners in regulation. Conservation groups and environmental movements are well positioned to provide such accountability. Given the current tensions between industry and such parties this strategy may prove challenging in practice but beneficial in the long run.

Ayres and Braithwaite's 'benign big gun' is related to regulatory dimensions directly through the capability of top down direction and 'proper legal and system processes' to limit regulatory powers. The adopted philosophy of persuasion over punishment can be seen as aiding this gun. The inability of the regulatory agency to act/deter environmental harm is demonstrated by rhetorical adherence to regulatory benchmarks where practices at times fall short of 'world's best' and do not achieve 'beyond minimum compliance'.

The inherent politicisation of this system of regulation and amelioration on commercial grounds is evidenced by the shaping of environmental regulation by State and Federal Governments to allow continuing environmental harm. This is fostered by the extensive long running connections between government, industry and regulatory bodies and the continued overt support of the industry by the state.

Having stated such tensions it is important to note that the system is set up to promote continual improvement which to a degree has been seen (for example increasing independence within the regulatory agency and the removal of FT's exemption under Freedom of Information Act). Also noteworthy is the level of pride and dedication to the industry and environmental regulation that was strongly voiced by those striving to achieve sustainable practices. The issue however is that despite good intentions the inherent conflict of interest in this self-regulating system appears to have the ability to jeopardise environmental outcomes.

At the heart of this system the question remains: how can the environment be protected from environmental harm if the system of regulation is not driven by ecological principles, but rather economic imperatives?

Given the current system it is difficult to see how balanced judgements can be made by regulators at the coal face when their position presents as 'hopelessly compromised' (Manning 2003: 13). Despite the concern and clear commitment of many FPOs, the burden on these few to protect the forests for all may be too great given the influence from top down directions.

The bottom line is that Tasmania's forests belong to all and accordingly they should be managed to reflect this – in the words of one FPO;

[A]t the end of the day I don't see the state forest or any of the forests as being 'my forests', it's Tasmania's forests and Australia's forests and how

we manage that should surely be a reflection on how people want us to manage it and I get the feeling that [at] the moment its not

The state of the environment is a major concern for many young Australian's (Behind the 2007); the generation to which these forests will be handed. Consequently there is an obligation on all those who form part of the system to act now and effect changes extending beyond system structure to enable environmental regulation to provide good regulation of the environment so the future is preserved.

This thesis provides a preliminary investigation regarding the environmental regulation in place around the Government Business Enterprise. Forestry Tasmania, Cityen the information documented, and tensions illustrated, much more research is required. To identify, understand, address, and improve environmental regulation in practice, greater focus needs to extend to those operating under regulations from upper level management through to ground level operators and contractors.



APPENDICES

Appendix 1: Email to Forestry Tasmania's Forest Practices Officer's

Subject: Seeking Regulation Research Participants:

2

letter_to_participant s.doc

Attachments:

Forest Practices Officers,

Nicola Pearce is conducting independent research in the area of environmental regulation as part of a Masters Thesis for the University of Tasmania and is looking to interview a number of Forest Practices Officers (FPOs) from within Forestry Tasmania (see below).

Nicola has discussed her project with me and Steve Read and has established that the research is legitimate. Nicola will meet with Kevin Swanepoel next week to gain an understanding of FT's Environmental Management System. I have agreed to forward her interview request to the 78 FPOs within FT for their consideration.

Please consider Nicola's request and respond directly to her if you would like to be interviewed as part of the study.

Manager, Planning

Seeking Regulation Research Participants:

I am conducting independent research in the area of environmental regulation as part of a Masters Thesis for the University of Tasmania and am looking to interview a number of Forest Practices Officers (FPOs) from within Forestry Tasmania.

I ar enc. on the pather information from FPOs to help identify the ways in which the environment is regulated and managed by Forestry Tasmania. The information provided by FPOs will assist the researcher's systemic analysis of Forestry Tasmania's regulatory structure by providing insight into the type of ground level regulation provided by FPOs. If you are at all interested please see the attached information letter for further details.

Regards,

Nicola Pearce Postgraduate Student University of Tasmania A

Attached Information Letter

Private Bag 17 Hobart Tasmania 7001 Australia Phone (03) 6226 2186 Fax (03) 6226 2279



SCHOOL OF SOCIOLOGY & SOCIAL WORK

16 August 2007

Dear Potential Participant,

I am seeking your help as a Forest Practices Officers within Forestry Tasmania to provide insight into the ways in which the environment is regulated and managed. This study is part of my Post Graduate Masters Thesis at the University of Tasmania.

Its primary aim is to analyse the regulatory structure of Forestry Tasmania. I am seeking your assistance to provide information in relation to your role as a forming part of Forestry Fasmania's ground level regulation.

Questions cover 5 main areas

- Background of participant
- Workplace activities of participant
- Lducation and training of participant
- Research of participant
- Key issues and concerns of participant

If you are happy to participate, you can do so at a time and place convenient to you in one of two ways;

- 1 Through a face to face interview
- 2 or an interview over the phone

Lace to Lace interviews will be tape recorded and interviews will take approximately 30 minutes to complete. I am seeking to have interviews completed by mid September 2007

If you would be willing to take part in an interview please indicate this by contacting me via *email* [email suppressed], *tetter* posted to the School of Sociology & Social Work (Private Bag 17, Hobart, 7001), or by *phone* on 03 6226 2186 (School of Sociology) and feave a message which includes the following:

- a Preferred option of either phone or face to face interview
- b At least 3 different times and relevant locations (if necessary) for the interview to be conducted
- c A contact source (email, phone or postal address) for me to confirm the time and place.

Anonymity will be actively protected in the writing up of results and presentation of findings: Respondents shall not be identified by name in the research.

Please note that the information being collected is seeking to gain a better understanding of Forestry Tasmania's regulatory structure. Raw findings (without identifiable features) will be made available to all participants and Forestry Tasmania. The raw data from this study will be securely stored at the University of Tasmania for a period of five years prior to being destroyed.

Please note that your participation is entirely voluntary, and evidenced by your willingness to answer the questions through interviews or questionnaires returned. You may, of course decline to answer any question, and require that any information you have supplied to date be withdrawn from the study.

This study has been approved by the Human Research Ethics Committee (Tasmania) Network. Please contact Clive Skilbeck oo 03 62267459 if you have any concerns in regards to this matter. If you have any queries that you want answered please feel free to email me at [email suppressed], otherwise I look forward to hearing from you in the near future. Thank you for your time

Regards.

Nicola Pearce Postgraduate Student University of Tasmania Appendix 2: Interview schedule for Forestry Tasmania's Forest Practices
Officers

Background Information

- 1. Age:
- 2. Sex. Male/Female
- 3. Educational Qualifications:
- 4 Previous Employment/Position (and date):
- 5. Agency/department for which you presently work:
- Position description:

Workplace Activities

- Main focus of weekly activities:
- Usual daily tasks:
- 9. Are you responsible for any specific area of environmental regulation or management?
- 10. How and when did you become a FPO?
- 11. What was the process that you went through to become a FPO?
- 12 Which laws or guidelines are most relevant to your work? (e.g., environmental laws requiring certain things of you or your department)
- 13. How often would you actively consult or refer to relevant laws or guidelines in the course of your work?
- 14. In pursuing regulatory activities, with whom do you tend to have the most contact? (e.g., specific industries, community groups, other government departments)
- 15. Are there specific individuals or networks with whom you have personal or more informal contact in dealing with environmental regulation matters? (if so, who, and why these people or agencies)
- 16. What time and resources are you able to devote to this area of your work? (estimate of percentage of time/resources)
- 17. How often do you review your activities and routines in relation to environmental (regulatory) matters?
- 18. Are you accountable to anyone for environmental-related monitoring and/or compliance activities? (who specifically)
- How much support is there for environmental regulation activities in your workplace? (why or why not)
- 20. In practical terms, what kinds of things have you done (or would you do) in regards to your particular area of responsibility (vis-à-vis environmental regulation)? (specifically, describe your activities in relation to monitoring, enforcement and education on regulation and compliance issues)

Education and Training

- 21. (Prior to attaining your present position) Have you had any prior experience and/or training in environmental regulation and management?
- Were you given briefings and/or training on the subject as part of your induction to your present position? (by whom - management, prior person in position, specialist personnel)

- 23. Are in-service training and/or workshops available on these issues?
- 24. Would you undertake further education and/or training in the area of environmental regulation: Yes/No (if no seen as unnecessary, already know enough, time constraints, problems with regulators themselves)
- 25 Is there provision within your workplace/agency for allocation of time/money by the organisation for members to undertake such courses? Yes/No (provide details)

Research

- 26. Does your agency/department undertake any research specifically in the area of environmental regulation? If so, which topics?
- 27. If research is undertaken/information collected, how and to whom are the findings/summaries distributed?
- 28. Are you aware of possible funding sources for research on environmental issues, including regulation and management? If so, please list.
- 29. Would you like to undertake research as part of further study/post-graduate study?

Key Issues

- 30. Is environmental regulation a significant issue for your agency/department? Why or why not?
- 31. From the point of view of your own work environment, what do you see as the key issues surrounding the implementation of environmental regulation?
- 32. How do you think regulatory legislation is actually framed or made (who does it), and who provides in-put into the legislative process (and how do they do so)?
- 33. How effective do you feel are the present laws and procedures relating to environmental issues? (are they good/bad; make a difference/no real difference; why or why not)
- 34. What do you think could or should be done to improve current regulatory and management practices in this area (e.g., changes in workplace practices, resource allocation, training)?
- 35. Do you feel that public opinion plays a role in your work as a regulator? And if so what sort of role?
- 36. Any other comments or suggestions?

Appendix 3: Forestry Tasmania Safety and Environmental Management System (SEMS) Register of Legal and other requirements

1 CONTENTS

In addition to legal requirements listed here, the "Register of Consents" file F62552 contains relevant licences and permits for Forestry Tasmania

1.1 Commonwealth Acts, Regulations and Agreements

Aboriginal and Torres Strait Island Protection Act 1984

Australian Heritage Council Act 2003

Civil Aviation Act 1988

Civil Aviation Regulations

Environment and Heritage Legislation Amendment Act 2003

Environment Protection and Biodiversity Conservation Act 1999

Human Rights and Equal Opportunity Commission Act 1986

National Environment Protection Measures (Implementation) Act 1998

Native Title Act 1993

Renewable Energy (Electricity) Act 2000

Tasmanian Regional Forest Agreement 1997

Tasmanian Community Forest Agreement 2005

1.2 Tasmanian Acts and Regulations

Aboriginal Lands Act 1995

Aboriginal Relics Act 1975

Aboriginal and Torres Straight Island Protection Act 1984

Animal Welfare Act 1993 and Animal Welfare Regulations 1993

Agricultural & Veterinary Chemicals (Control of Use) Act1995

Agricultural & Veterinary Chemicals (Control of Use) Regulations 1996

Agricultural & Veterinary Chemicals (Control of Use) (Agricultural Spraying) Order 1996

Agricultural & Veterinary Chemicals (Control of Use) (Handling of Chemical Products) Order 1996

Agricultural and Veterinary Chemicals (Control of Use) (Provision of Information on Agricultural Spraying)

Order 1996

Anti Discrimination Act 1998

Building Act 2000

Building Regulations 1994

Crown Lands Act 1976

Dangerous Goods Act 1998

Dangerous Goods (General) Regulations 1998

Dangerous Goods (Road and Rail Transport) Regulations 1998

Environmental Management and Pollution Control Act 1994

Environmental Management and Pollution Control (Waste Management) Regulations 2000

Firearms Act 1996

Fire Service Act 1979

Fire Service (Miscellaneous) Regulations 1996

Food Act 2003

Forestry Act 1920

Forest Practices Act 1985

Genetically Modified Organisms Control Act 2004

Gene Technology Act 2001

Gene Technology Regulations 2003

Historic Cultural Heritage Act 1995

Inland Fisheries Act 1995

Land Use Planning and Approvals Act 1993

Liquor licensing Act 1990

Litter Act 1973

Local Government (Building and Miscellaneous Provisions) Act 1993

Mineral Resources Development Act 1995

Mining (Strategic Prospectivity Zones) Act 1993

National Parks and Reserves Management Act 2002

Nature Conservation Act 2002

Natural Resources Management Act 2002

Plant Quarantine Act 1997

Plumbing Regulations 1994

Poisons Regulations 1975

Police Offences Act 1935

Public Land (Administration and Forests) Act 1991

Regional Forest Agreement (Land Classification) Act 1998

Roads and Jetties Act 1935

Security sensitive Dangerous Substances Act 2005 (No. 31 of 2005)

State Policies and Projects Act 1995

Threatened Species Protection Act 1995

Timber Promotions Act 1970

Water Management Act 1999

Weed Management Act 2000

Weed Management Regulations 2000

Wildlife Regulations 1999

Workplace Health and Safety Act 1995

Workplace Health and Safety Regulations 1998

Workers Rehabilitation and Compensation Act 1988

1.3 Commonwealth Policies

Inter-governmental Agreement on the Environment 1992

National Forest Policy Statement 1992

National Greenhouse Strategy 1998

National Indigenous Forestry Strata 2005

National Strategy for Ecologically Sustainable Development 1992

National Strategy for the Conservation of Australia's Biological Diversity 1996

National Water Quality Management Strategy 1993

National Weed Strategy 1997

Plantations for Australia - The 2020 Vision 2002

1.4 State Policies

Coastal Policy 2006

Permanent Native Forest Estate Policy 2007

State Policy on the Protection of Agricultural Land 2000

Water Quality Management Policy 1997

1.5 Forestry Tasmania Documents

Refer to register of key SEMS documents

1.6 Commonwealth and State Codes of Practice

Australian Code for the Transport of Dangerous Goods by Road and Rail 1998 (Commonwealth)

Australian Code for the Transport of Explosives by Road and Rail (Australian Explosives Code) 2000

(Commonwealth)

Code of Practice for Aerial incendiary Operations 2000

Code of Practice for Aerial Spraying 2000

Code of Practice for Capture, Handling, Transport and Slaughter of Brush-tail Possums 2000

Code of Practice for Ground Spraying 2001

Code of Practice for the Humane Shooting of Kangaroos

Forest Practices Code 2000

Forestry Safety Code 2002

Mineral Exploration Code of Practice 1999

Quarry Code of Practice 1999

Reserve Management Code of Practice 2003

1.7 Australian Standards

AS 1596-2002 Storage and Handling of LP Gas

AS 1940-2004 The Storage and Handling of Flammable and Combustible Liquids

AS 1216-1995 Class Labels for Dangerous Goods

AS 2243 -10-2004 Safety in Laboratories-Chemical Storage

AS 2187 1 -1998 Explosives - Storage, Transport and Use, Part 1 Storage

AS 2187 2 -1993 Explosives - Storage, Transport and Use Part 2 Use of explosives

AS 2188 Explosives - Relocatable Magazines for Storage

AS 2507-1998 The storage and handling of agricultural and veterinary chemicals

Australian Code for the Transport of Dangerous Goods by Road and Rail

AS/NZS ISO 14001 2004 Environmental Management Systems - Specification

AS/NZS ISO 14004 2004 Environmental Management Systems - General Guidelines

AS 4708(Int)(Set) - 2003 The Australian Forestry Standard

AS/NZS 4801-2001 Occupational health and safety management systems

AS2243 1-1990 Safety in Laboratories - General

AS 2243 2 - 1990 Safety in Laboratories - Chemical Aspects

AS/NZS1269 -2005 Noise Management

AS 1270-1988 Acoustics - Hearing protectors

AS/NZS 4602 - 1999 High visibility safety garments

AS/NZS 4453 3 1997 Protective leg wear

AS/NZS 4453 -1997 Protective clothing for users of hand-held chainsaws

AS/NZS 4399 1996 Sun protective clothing - Evaluation and classification

AS 4024 1-1996 Safeguarding of machinery

AS 3765 1 - 1990 Clothing for protection against hazardous chemicals

AS 3575-1995 Clearing saws, brush cutters and grass trimmers - safety requirements

AS/NZS 3000 - 2000 Electrical Installations

AS 2980 - 2004 Qualification of arc-welders for welding of steels

AS 2759 - 2004 Steel wire rope - Application guide

AS 2727 - 1997 Chainsaws - Guide to safe working practices

AS 2726 2 - 2004 Chainsaws - Safety requirements Part 2 Chainsaws for tree service

AS 2726 - 2004 Chainsaws - Safety requirements

AS 2664 -1983 Earthmoving machinery - Seat belts and seat belt anchorages

AS 2294 - 1994 Earth moving machinery - protective structures

AS/NZS 2210 - 1994 Occupational protective footwear

AS1NZS 2161 - 2000 Occupational protective gloves

A8/NZS 2153 - 1997 Tractors and machinery for agriculture and forestry - Technical means for ensuring safety

AS/NZS 1906 - 1993 Retro reflective materials and devices for road traffic control purposes

AS/NZS 1892 - 1996 Portable ladders

AS/NZS 1891 -1995 Industrial fall-arrest systems and devices. Part 1 Safety belts and harnesses

AS/NZS 1801-1999 Industrial safety helmets (incorporating Amdt1)

AS/NZS 1801 - 1997 Occupational protective helmets

AS/NZS 1800 - 1998 Occupational protective helmets selection, care and use

AS 1319-1994 Safety signs for the occupational environment

A8/NZS 1336 -1997 Recommended practices for occupational eye protection

AS/NZS 1337 1992 Eye protectors for industrial applications

AS 1554 - 2004 Structural steel welding code

AS 1657 - 1992 Fixed platforms, walkways. Stairways and ladders - Design, construction and installation

As/NZS 1715 - 1994 Selection, use and maintenance of respiratory protective devices

AS/NZS 1716 1994 Respiratory protective devices

(Note: This is not an exhaustive list. Consult with Forestry Tasmania Library regarding specific Australian Standards.)

Appendix 4: Defines Serious and Material environmental harm as per Environmental Management and Pollution Control Act 1994

Environmental Management and Pollution Control Act 1994 (No. 44 of 1994)

Section 5. Environmental harm

- (1) For the purposes of this Act, environmental harm is any adverse effect on the environment (of whatever degree or duration) and includes an environmental nuisance
- (2) For the purposes of this Act, the following provisions are to be applied in determining whether environmental harm is material environmental harm or serious environmental harm:
 - (a) environmental harm is to be treated as serious environmental harm if -
 - it involves an actual adverse effect on the health or safety of human beings that is of a high impact or on a wide scale; or
 - (ii) it involves an actual adverse effect on the environment that is of a high impact or on a wide scale; or
 - (iii) it results in actual loss or property damage of an amount, or amounts in aggregate, exceeding ten times the threshold amount;
 - (b) environmental harm is to be treated as material environmental harm if -
 - it consists of an environmental nuisance of a high impact or on a wide scale; or
 - it involves an actual adverse effect on the health or safety of human beings that is not negligible; or
 - (iii) it involves an actual adverse effect on the environment that is not negligible; or
 - (iv) it results in actual loss or property damage of an amount, or amounts in aggregate, exceeding the threshold amount.
- (3) For the purposes of subsection (2), "loss" includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent or mitigate the environmental harm and to make good resulting environmental damage.
- (4) For the purposes of subsection (2), "threshold amount" means \$5 000, or if a greater amount is prescribed by regulation, that amount.

Appendix 5: Amendments to the Tasmanian Regional Forest Agreement (TRFA) February 2007

Clause	TRFA 1997	TRFA 2007
68	The state agrees to protect the Priority Species listed in Attachment 2 (Part A) [federally listed threatened species] through the CAR [Comprehensive Adequate and Representative] Reserve System or by applying relevant management prescriptions	The Parties agree that the CAR Reserve System, established in accordance with this Agreement, and the application of management strategies and management prescriptions developed under Tasmania's Forest Management Systems, protect rare and threatened fauna and flora species and Forest Communities.
70	The Parties agree that management prescriptions or actions identified in jointly prepared and agreed Recovery Plans or Threat Abatement Plans will be implemented as a matter of priority	The Parties agree that where a Recovery Plan for a forest-related species in Tasmania or a Threat Abatement Plan concerning a Priority Species is in force, any recommended actions in the Recovery Plan or the Threat Abatement Plan that are within the jurisdiction of the parties will be carried out in accordance with the timelines specified in the relevant Plan If an action has not been carried out in accordance with the timelines in the relevant Plan it will be carried out as soon as possible afterwards.
96	The State agrees that any changes to the Priority Species in Attachment 2 including new or altered management prescriptions developed over the term of the Agreement will	The State agrees that any new or altered management prescriptions that are developed over the term of the Agreement for the Priority Species in Attachment 2, as amended from time to time, will
	(a) be adequate to maintain the species identified,	(a) provide for the maintenance of the relevant species;

Source: Brown 2007

Appendix 6: Forestry Tasmania (FT) Exemptions

The following exemptions are afforded where FT's forestry operations are carried out in accordance with:

The RFA	The Forest Practices Act 1985	An approved Forest Practices Plan (FPP)
Planning process set out in the Land Use Planning and Approval Act 1993	Gaining heritage council approval for removal, destruction or lopping of trees that will affect the heritage significance of a registered place s32 Historic Cultural Heritage Act 1993	Forestry activities from EPBC Act provided FPP includes management prescriptions for threatened species
Assessment and approval requirements of Environment Protection and Biodiversity Conservation (EPBC) Act 1999 under section 38 unless forestry operations are carried out on a World Heritage property, carried out within a Ramsar wetland, or incidental to another action whose primary purpose does not relate to forestry	Forest management plans may "prohibit or restrict the exercise of a statutory power in respect of the land to which it applies", regardless of any other legislative provision under section 22C of Forest Practices Act	Killing, injuring, destroying and damaging 'threatened species' (as listed in act) without a permit under section 51(3) Threatened Species Protection Act 1995

Source: EDO (2007: 1-4)

Appendix 7: Changes to the Forest Practices Authority from the Forest Practices Board

- a) The day to day operation of the FPA is the responsibility of the chief FPO and FPA staff, where the board is responsible for higher level governance
- The board is to made up of independent experts appoint by the minister relating to certain expertise and knowledge criteria (as opposed to 'experts from representative organisations')
- c) The FPA advisory council is to include an independent chair and a member representing local government, and a member representing forest workers and contractors.
- d) The registry of the FPT is transferred to that of the Resource Management and Planning Appeals Tribunal
- e) Additional reporting on compliance, with certificates of compliance to be lodged within 30 days of completion of each discrete operation phase of the FPP, and 'persons with a poor track record or poor capacity to supervise operations can be required to engage a Forest Practices Officer (FPO) to lodge more regular progress reports on compliance to the FPA' (FPA 2005: 8).
- f) 'Maximum penaltics for offences increase from \$15,000 to \$100,000 per offence', 'the statute of limitations is increased from one year to three years', and 'The FPA is given broader powers to impose fines as an alternative to prosecution'.
- g) The FPA is to review the operation of the Forest Practices system once every five years and report this to the minister to assist with its continual improvement.

Source: FPA (2005: 8)

Appendix 8: Front Cover of Forest Practices Plan

Forest Practices Act 1985	FORESTE	RACTICESPLAN	FPP No.:	DJTeen	
Certification t/o -	PLAN TYPE	The state of the s			
Phis I orest Practices Plan authorises forest period specified in the Pfan provided that the This authority is given for the purposes of the mains that they comply with all relevant law	practices and operations e operations are corned o e Forest Practices Act 19	out in accordance with the i 985 only. Those carrying ou	Plan If the operations und	ier the Pian should	d
Coupe Name	Location	-	PTR present or pr	roposed	-
Tenure	IBRA region		PTR No(s)		
Oistrict Deivent	Municipality		UPI No(s)		
Map Sheet	Grid Reference Ont	E 0mN			100
Applicant	Address	X X	Phone		
Landovyner	Address	· · · · · · · · · · · · · · · · · · ·	Phone	2.55	
Principal Processor	- 15. IS.	Contractor			_
Current RFA Forest Community and/or Land	경기지 생각이 있는데 나를 하면 하고 있다면 되는데 때 하는데 되었다.	2014-14-14-14-14-14-14-14-14-14-14-14-14-1		Presc ha	Tot
Current RFA Forest Community and or Land		Presc h	a Presc ha	Presc na	10
	** **	N. P. (1991) 1991 ()	0 0	<u>_</u>	**
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	(E)	0.55	0 0	ō	
85 JB		,	0 0	- 0	_
10 AND 1		-	0 0	. 0	-
Nett Operation Area 0 Total Area	to be Reforested	O Total Area to be Harves	ted 0 Total A	rea of Operation	
Minimum class of equipment to be used	THE RESERVE OF THE PROPERTY OF	ater 1 : Cultural H	this Forest Practice	es Plan for discape	ō
		Other Products			-
	od (cu m / t) 0	Volume 0			-
Ocurry Name Number Depth of overbure Person respons ble (Quarry manager)	M	aximum Expected Annual			
					27.0
Estimated number of maniferns available to		ns Dicksonia antartica [Phon		
Estimated number of manferns available to free forn Harvester Is the operation within a lown water calching River	hent? No Williams Town Town	Vater Intake Code No 0 Nett Arr New or major uj Municipat or Mai	Distance To ea of Crown Rd Res ograde of existing or	o Intake (km) 0 erves uffet onto	-+
las Local Government peen consulted as p	be harvested 0 Address ment? No W Town per the FPC? unning Scheme? Harve	Vater Intake Code No 0 Nett Arr New or major uj Municipat or Mai No Known Domestic	Distance To ea of Crown Rd Res ograde of existing ou in Roads?	o Intake (km) 0 erves uffet onto ke within 2 km?	-
Estimated number of maniferns available to free fern Harvester. Its the operation within a fown water calching River. Its togal Government peen consulted as powering the consulted as powering a Municipal Plan Period to which plan applies. From Estimated completion date for Roading Plan prepared by	be harvested 0 Address ment? No W Town per the FPC? unning Scheme? Harve	Vater Intake Code No 0 Nett Arr New or major up Municipal or Mai No Known Domestic To. esting Ref	Distance To ea of Crown Rd Res pgrade of existing ou in Roads? c Water Supply Intal forestation establish	o Intake (km) 0 erves uffet onto ke within 2 km?	

Source: FT SEMS (2007)

Appendix 9:	Audit Factors for Forest	Practices Plans	

Scoring System used for all questions in the audit of Forest Practices Plans

Performance Rating	Description	Score
High	Fully addressed all judgment criteria and achieved a very good result without causing a noticeable or likely adverse impact	4
-31 11 - 37 - 37 - 37 - 37 - 37 - 37 - 37 - 3	Above sound – scored but not defined	3.5
Sound	Satisfactorily addressed the judgement criteria and achieved an acceptable result without causing an actual or likely significant adverse impact	
	Less than sound – scored bit not defined	2
Unacceptable	Not adequately addressed judgement criteria or achieved and\ unacceptable result and/or is likely to result in serious adverse impact	1
Not auditable	The condition/situation does not occur e.g. high erodibility Operations have as yet not commenced Insufficient or no objective evidence to make a judgement	NA/0

Audit Factors

Planning

- Was a complete copy of FPP available?
- Was the FPP in a sound and secure filing system?
- 3. Was FPP, and variations fully signed and dated
- Is FPP/variations completely, clearly and legibly documented?
- 5. Is the FPP and variations in accordance with the code?
- 6. Were all variations documented?
- 7. Was State and Local Government consulted, as required?
- 8. Was local Government notified of the operational start date?
- 9. Have all adjacent landholders been identified and notified?
- 10. FPP indicate that a fire management plan was prepared?
- 11. Has planning identified intakes, aquaculture and threatened species?

Roading

- 12. Road location minimised soil erosion and stream sedimentation?
- 13. Has valley bottom roading minimised potential stream?
- 14. Has roading avoided high or very highly erodible soils?
- 15 Has the road standard proven adequate to the haulage task?
- 16. Are table drains properly constructed to carry likely flows?
- 17. Is culvert spacing and location adequate?
- 18. Have culverts been effectively designed and constructed?
- 19. Has the road been adequately drained?
- 20. Has access tracks been drained and stabilised after use?
- 21. Are cuts and fills balanced and/or spoil disposed of properly?
- 22. Are batter slopes stable?
- 23. Have potential instability been recognised and managed?
- 24. Have Code steep country prescriptions been implemented?
- 25. Has clearing width and top soil stripping been minimised?

- 26 Have new or upgraded stream crossings been well located?
- 27. Have new or upgraded stream crossings been well designed?
- 28. Have new/upgraded stream crossings been well constructed/
- 29 Has drainage been diverted within 50 m of streams?
- 30 Have temporary crossings Class 2 & 3 been removed and drained?
- 31 Have permanent all weather roads been suitably surfaced?
- 32 Have nonconforming or hazardous roads been closed or rehab?
- 33 Does the condition of all retained roads minimise erosion?
- 34 Does the condition of roads, of no further use, min. erosion?
- 35 Have quarries and pits been well located, managed and rehabilitated?
- 36 Has an effective maintenance system been applied?
- 37. Has the FPP/variations/Code been followed?

Harvesting

- 38. Is the extraction design consistent with the Code?
- 39 Has appropriate harvesting equipment been used?
- 40. Has the harvesting boundary been clearly marked?
- 41 Has harvesting been confined within the boundary?
- 42 Has all debris been retained within the harvesting boundary?
- 43 Has snigging complied with wet weather limitations?
- 44 Has snigging avoided the creation of by pass tracks?
- 45 Has cartage complied with wet weather limitations?
- 46 Does snig track location and construction facilitate drainage?
- 47 Have snig tracks avoided crossing Class 1 and 2 watercourses?
- 48. Have Class 3 & 4 ST crossings been minimised and well located?
- 49 Have wet major STs, taken steps to minimise avoidable impact?
- 50. Has snigging avoided serious avoidable impact?
- 51 Has snigging along drainage lines been avoided?
- 52. In thinning ops, has ST location minimised damage to trees?
- 53 Have snig tracks been progressively drained?
- 54 Does snig track drainage comply with code specifications?
- 55 Has snig track drainage been effective?
- 56 Has snig track rutting been stabilised?
- 57. Have snig tracks crossings been removed and stabilised?
- 58. Are landings appropriately located?
- 59. Are landings appropriately sized?
- 60. Have landings been properly constructed?
- 61 Have landings been properly managed and stabilised?
- 62 Is the width of the streamside reserves or/MEZ correct?
- 63 Have Class 1, 2, & 3 streamside reserves & required, class 4 MEZ, been clearly taped?
- 64 Have required Class 4 streams been upgraded to new guidelines?
- 65 Has felling avoided unreasonable damage to streamside reserves and machinery exclusion zones?
- 66 Has machinery been excluded from streamside reserves and Machinery exclusion zones?
- 67. Has harvesting slash been kept out of streamside reserves or Class 4 Machinery exclusion zones?
- 68 Has felling in streamside reserves and Machinery exclusion zones complied with the Code?
- 69 Has harvesting in plantation streamside reserves complied with Code?

- 70. Have cables been pulled thru class 1, 2, 3 SSR without damage?
- 71. Have potential cable erosion channels been stabilised?
- 72. Has the FPP and variations been followed?

Reforestation

- 73. Has the FPP and variations been followed?
- 74. Has an appropriate reforestation technique been prescribed?
- 75 Has fuel reduction burns, been effectively carried out?
- 76 Have streamside reserves been protected from fire?
- 77 Have Class 4 stream Machinery exclusion zones been protected from fire?
- 78. Has appropriate seed been selected for native forest regeneration?
- 79. Is an effective stocking likely to be achieved?
- 80. Have trees been protected from grazing and browsing damage?
- 81. Has burning been effectively carried out and protected streamside reserves?
- 82. Has cultivation minimised the risk of soil erosion?
- 83. Cultivation excluded within 2 m of drainage depressions?
- 84. Have Class 1, 2, and 3 streams and their streamside reserves been protected?
- 85 Have Class 4 streams and their 10 m Machinery exclusion zones been protected?
- 86. Have the specified stocking standard been achieved?
- 87. Have trees been protected from grazing/browsing damage?
- 88. Does tracks and firebreaks location protect water and visual values?

Fuels and Rubbish

- 89. Have Fuels, oils, greases and chemical been well managed?
- 90. Has all rubbish been removed?

Soils and Water

- 91. Has the soil erodibility rating been correctly determined?
- 92. Has landslip potential been correctly determined?
- 93. Has burning intensity been appropriate for the soil?
- 94. High/v high erodibility soil or >landslide threshold referred?
- 95. Evidence of post-operational accelerated soil erosion?
- 96 Have all Class 1, 2, 3, & 4 streams been identified AND classified?
- 97. Evidence of significant post-harvest stream erosion?

Flora

- 98. FPP evaluation correctly completed for plant communities?
- 99. Has the evaluation correctly completed for priority plant?
- 100 Has the evaluation completed for sites potential?
- 101. FPP evaluation completed for effects on Reserves and SMZs?
- 102. Have flora values been referred to FPB Botanist as required?
- 103. Have important flora values been taken into account in FPP?
- 104. Have the botanical requirements of FPP been followed?

Fauna

- 105. Was all the required information supplied in the evaluation?
- 106. Were known localities and habitat for threatened sp. Identified?
- 107. Was FPB advice sort on threatened species, if required?
- 108. Were prescriptions for threatened species included in FPP?
- 109. If present, were WHS identified and WHS prescriptions?
- 110. If present, were faunal SMZs identified and prescriptions included?

- 111. Was the requirement for WHCs correctly assessed?
- 112. Have FPP threatened fauna prescriptions been implemented?
- 113. Have WHS prescriptions in the FPP implemented?
- 114. Were the SMZ prescriptions in the FPP implemented?
- 115. Were the WHC prescriptions in the FPP implemented?

Landscape

- 116 Was the LMO assessed correctly?
- 117. Have all viewing issues been identified?
- 118. Was a notification sent to the FPB where required?
- 119 Clearfall harvesting
- 120 Plantation development
- 121 Partial harvesting
- 122 Roads, snig tracks, landings, firebreaks and quarries
- 123. Skylines
- 124. Steep areas
- 125. Were the FPP prescriptions applied correctly?
- 126. Was the recommended LMO achieved?

Cultural Heritage

- 127. Has MDC zoning been complied with in State forest?
- 128. Has Conserve been consulted and site info. Identified?
- 129 Has aboriginal cultural heritage sensitivity been identified?
- 130. Was archaeologist's advice sought where necessary?
- 131. Have cultural heritage prescriptions been followed?
- 132. If a post op survey recommended, was it completed?
- 133. Have site recording and mgt been in accordance with Act?

Geoscience

- 134 Has geoscience evaluation been correctly completed?
- 135 Has the FPB Geoscientist been consulted as required?
- 136. Have Vulnerable Karst Soils been correctly identified?
- 137. Have appropriate prescriptions been included in the FPP?
- 138. Have geomorphology prescriptions been implemented?
- 139 In a karst area, have the FPC provisions been followed?

Source: Annual Report of the Forest Practices Authority 2005-06 (75-81)

Appendix 10: The Make up of the Forest Practices Advisory Council

Forest Practices Act 1985

37A. Forest Practices Advisory Council

- (2) The Council consists of -
 - (a) the chairperson of the Board, or that person's nominee; and
 - (b) a person nominated by the Secretary of the responsible Department in relation to the <u>Environmental Management and Pollution Control Act</u> 1994; and
 - a scientist who in the opinion of the Minister has particular expertise in forest conservation; and
 - (d) a person nominated by the Municipal Association of Tasmania; and
 - (e) a person to represent the interests of the sawmilling industry, being one of the following nominees selected by the Minister after considering both nominees:
 - (i) a nominee of the Forest Industries Association of Tasmania;
 - (ii) a nominee of the Country Sawmillers Federation; and
 - a person nominated by the Forest Industries Association of Tasmania to represent the interests of the pulpwood industry; and
 - (g) a person nominated by Private Forests Tasmania.

Appendix 11: Forestry Tasmania's environmental risk assessment framework

Consequence	Environmental Impact		
Minor	Event with no adverse effects which may, or may not, entail an exceedance of licence levels		
Moderate	Event with some (temporary) adverse effects		
Major	Event with long term effects; provokes actions from authorities, complaints from Community, environmental action groups, limited media attention		
Catastrophic	Event with major impact on environment; (Potential) revoking of licence, public outrage, loss of community acceptance, massive media attention.		

Consequences Likelihood	Minor [Low]	Moderate [Medium)]	Major [High]	Catastrophic [High]	
Almost certain common repeating occurrence certain			*	"	High (H) Immediate control required
Likely Know to occur or, "it has happened before"			H	. "	
Possibly Could occur, "I've heard of it happening"	der (c. l		м	,	Medium (M) Review current risk control
Unlikely Not likely to occur	Tex ## A . (2 n. 2007)				
Rare Practically impossible	The Countries			16.32	Low (L) Risk acceptable - review

Source: FT SEMS 2007

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