

THE ROLE OF GOVERNMENT IN TECHNICAL REGULATION “FINDING THE RIGHT BALANCE”

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ABSTRACT

Technical regulation of pipelines has been subject to an ongoing debate over the history of the pipeline industry in Australia. In that time, there have been fundamental changes in community attitudes to issues such as the environment, the role of government, and the accountability of industry. Furthermore, there has been a fundamental shift in the way legislation is shaped, moving from prescriptive legislation (instructions on how to achieve regulatory objectives via detailed technical regulations) to objective legislation (legislative objectives are set and the licensee is charged with choosing the best means necessary to achieve those objectives).

The debate about the role of government in technical regulation is rarely conducted within the framework of a coherent, clearly articulated philosophy of regulation. However, issues such as the respective roles of government and industry cannot be effectively debated until such a framework is laid down.

This paper lays out the philosophy of regulation which underpins the South Australian Petroleum Act 2000 as a basis for ongoing discussion. It challenges both industry and regulators alike to develop or review their own philosophies of regulation in order to carry out a more productive debate. The analogy of the project management of an industry contract is presented to demonstrate that “we are all regulators” in various aspects of our working life. This analogy is used to develop a common understanding of the issues facing regulators in order to assist an informed debate on the role of government in technical regulation.

INTRODUCTION

Technical regulation in all States generally covers the following issues:

- Public safety
- Workplace safety (OH&S)
- Environmental safety
- Security of supply
- Land acquisition
- Security of tenure for licensee

Technical regulation covers the whole of the pipeline project life:

- Licensing process
- Production and commissioning
- Operations
- Abandonment

In any given State, these aspects will be covered by one or more pieces of legislation.

In South Australia, all of these aspects (with the exception of workplace safety) are covered by the Petroleum Act 2000. The following discussion is based on the thinking and experience of the PIRSA Petroleum Group in the development and subsequent implementation of that legislation.

DISCUSSION

*Why regulate?*¹

Regulation is a means by which our society attempts to balance the common and conflicting stakeholder objectives associated with any given enterprise.

Stakeholders include:

- Industry
- Shareholders
- Government
- Communities directly affected by a project
- Public interest groups
- The community at large

In general, the objectives which we are collectively trying to achieve (industry, government, community) include:

- Public and worker safety
- Environmental safety
- Security of supply
- Security of tenure
- Return on investment

Regulatory theory advocates that some form of state regulatory intervention is only justified where industry voluntarily fails to deliver outcomes which serve the public interest.

While it is acknowledged that the internal values of an organisation (their culture) drives their behaviour to a significant extent, industry is most likely to deliver public interest outcomes when those outcomes deliver a direct economic benefit to the industry.

However, where direct economic benefits are absent, the costs associated with any negative impacts of an activity are likely to be borne by other sectors of the community (costs are externalised). Typical “externalities” include land, air and water pollution, land degradation, misinformation and human exploitation. This is known as “market

¹ This section is largely based on information presented by Malavazos, M., “Principles and Philosophy of Best Practice Regulations: The New South Australian Petroleum Legislation”, PIRSA Petroleum Group Website www.petroleum.pir.sa.gov.au.

failure” and it is in this situation that government intervention through some form of regulation is justified.

The second aspect of market failure is “information asymmetry” whereby information required for informed decision-making by all stakeholders is not equitably accessible or available. Food labelling laws are an example of a regulatory instrument used to ensure that information required by consumers for informed decision-making is readily available.

Environment protection, public safety and the legal rights of other stakeholders are areas which are most vulnerable to market failure and are therefore in need of government intervention. Implicit in this requirement to address market failure is that regulations contain effective instruments to force compliant behaviour where the market has indeed failed.

In broad terms, regulation is required to:

- Grant rights to proponents to allow them to undertake developments (eg. pipeline licensing).
- Facilitate informed decision-making by all stakeholders during all phases of a project’s life (ie. provide mechanism whereby community can obtain assurance that the proponent is meeting its obligations).
- Enforce remedial action where the proponent is failing to meet its obligations.
- Provide mechanisms whereby natural conflicts in societal objectives are managed equitably.

We are all regulators

Ultimately, it is the community which allows any development or proceed or not. The community provides rights to undertake developments, but in return expects the licensee to discharge certain responsibilities (ie. manage the development in a manner which is acceptable to the community).

The regulatory system can be thought of as a contract between the community and the proponent which manages these rights and responsibilities, with the regulator acting as the project manager on the community’s behalf. This is a useful analogy by which industry can perhaps better understand issues faced by regulators, and thereby enter into a productive dialogue about the role of the regulator. Productive dialogue cannot be achieved unless there has been an attempt to understand and acknowledge the regulatory role.

To continue use of the analogy, the common features of project contracts and technical regulations are:

- Clear rules of engagement (established by the contract) including clear definition of respective roles and responsibilities.
- A system for ensuring that the party purchasing the contract is properly informed as to whether the rules are being adhered to (a performance review system)
- An agreement as to the remedial action to be undertaken when rules are broken (dispute resolution and corrective action)

The style of contract management is largely determined by the level of trust between the parties. The more it can be shown that the rules of engagement are being adhered to and the less reasons there are to resort to remedial action, the greater the

trust and confidence between parties. This is primarily a function of the information flow, but is also affected by factors such as the perceived the competency of individuals on both sides of the fence, and the level of understanding of the respective roles and responsibilities (in the regulatory relationship, the fundamental regulatory philosophy). These points are addressed in greater detail below.

Establishing clear rules of engagement

In the pipeline industry, we are very fortunate to have AS 2885 as a document which clearly establishes the majority of the rules of engagement. AS 2885 is document essentially produced by industry for industry which is owned by industry and endorsed by government.

This is quite unique. There are a few other industries where the technical regulation is governed by a single, cohesive document which is not readily subject to tinkering by interested parties without thorough review.

The objectives of the South Australian Petroleum Act 2000 are typical of those which exist in most State legislation in Australia. These are

- Minimise risks to the public and pipeline personnel
- Minimise environmental damage
- Maximise security of supply

The objectives of AS 2885 are exactly the same.

“This standard exists to ensure the safety of the community, protection of the environment and security of supply.”

Clearly, both industry and government are working to achieve the same objectives. While industry is also primarily driven by profit objectives, this does not diminish their responsibility to adhere to the Standard which enshrines these objectives.

Rules of engagement regarding environmental performance are usually established by a consultative approvals / licensing process. Difficulties can arise where environmental performance objectives and measurement criteria are not articulated in a manner which is clear to all stakeholders, so care is required to avoid this situation.

What is sometimes even less clear in the rules of engagement is who is responsible for what. It is at this point where confusion over the regulator’s role sometimes lies. This confusion is at times perpetuated by both industry and regulators, depending on the barrow that either party wishes to push at the time. This is not assisted by a less than clear understanding of a philosophy of regulation such as that articulated above.

The SA Petroleum Group takes the firm position that the *licensee* is responsible for meeting the regulatory objectives. The licensee is charged with having the technical and financial resources sufficient to undertake its business. Accordingly, the proponent properly bears the risk for those things over which it has direct control.

The pipeline licensee is responsible for:

- Design decisions
- Financial decisions
- Operation and maintenance strategies
- Meeting the objectives of the relevant legislation

- Demonstrating that the pipelines that it operates are safe to the community, technical regulators and land planners

These things are not the province of the regulator.

On the other hand, the regulator is the agent of the community, responsible for making informed decisions on the information presented by the licensee as demonstration of acceptable performance (discussed below).

The regulator is responsible to take appropriate action on behalf of the community when acceptable performance is not demonstrated.

The regulator is responsible for demonstrating to the community that it is acting in their best interests by making their decisions and processes transparent and subject to scrutiny. This includes ensuring that performance information is provided to the community where the licensee has not chosen to do so on its own initiative.

The consequence of clarifying what parties are responsible for is that it also defines what parties are not responsible for. Where these boundaries are crossed is often the cause of debate over the role of the regulator.

To summarise the foregoing in simple terms, it is not the job of the regulator to tell the licensee how to do its job, but is the regulator's job to find out that the job is being done.

How do I know that rules are being kept?

In order to determine whether the rules are being kept, a compliance monitoring regime needs to be established. An effective compliance monitoring regime is essential for informed decision-making.

Informed decision-making requires that the following elements are identified:

1. What do I need to know to be assured of compliance?
2. How do I find this out?

What do I need to know?

The ultimate focus of a compliance monitoring system is to assess whether or not the agreed *outcomes* have been achieved. However, an important part of this assessment is gaining assurance that there are procedures in place which can deliver the outcomes, and that they will indeed deliver the outcomes.

The relative focus on these two elements (outcomes and process) form the points of distinction between *objective* and *prescriptive* regulatory systems:

- Pure objective or *performance-based* legislation focuses on setting objectives to be achieved and is founded on the understanding that the licensee is entirely responsible for achieving those objectives by the means of their choice.

An objective regulatory system also requires the licensee to demonstrate the *existence, effectiveness* and *implementation* of procedures to achieve the objectives. Under this approach, the content of procedures is challenged ("What makes this procedure effective?"), but not prescribed ("You shall do this").

- Prescriptive legislation specifies procedures which are designed to achieve the objectives. This type of legislation has its shortcomings in that it often fails to recognise improvements in technology and processes which more efficiently and effectively achieve the objectives. In such cases prescriptive legislation often rapidly becomes outdated and ineffective. Secondly, by prescribing processes to

be followed, the government bears the risk of failure to achieve objectives, a risk that should be borne entirely by the licensee.

For the reasons outlined above, modern regulatory practice advocates the objective-based approach². In practice, any regulatory system contains both objective and prescriptive elements an attempt to provide an effective balance. For example, while the SA Petroleum Act 2000 is firmly based on the objective model, it prescribes the use of AS 2885 as the technical standard for high pressure pipelines³. However, the risk associated with prescribing AS 2885 is considered negligible on the basis that it represents industry best practice (as determined by industry), and therefore the risk ultimately lies with the industry. Notwithstanding that this prescription is included at with the support of the industry, it is also represents a pragmatic approach. Prescribing AS 2885 minimises the risk to the government of otherwise having to approve the use of competing standards which may or may not provide equivalent outcomes to AS 2885. Furthermore, this prescription is not inappropriate because the objectives of AS 2885 are the same as the regulatory objectives⁴.

Further subtleties associated with finding the right balance involves the degree to which processes are assessed under an objective based system. While demonstration of process is often a means of building trust that the licensee will be able to meet outcomes in the future, a common pitfall is to focus on the existence of a process (easy) rather than whether or not the process actually delivers the intended outcomes (hard). Another pitfall of focus on process is that the regulator can be become tempted to make directions regarding the content of the process (ie. adopt a prescriptive approach), thereby accepting a portion of the risk for the success or failure of that process.

How do I find out what I need to know?

Having established that any contract requires demonstration that:

- agreed outcomes are being achieved; and
 - effective procedures to achieve outcomes exist and are being implemented,
- the means by which this is demonstrated must be established.

A performance-monitoring program will consist of two components:

1. An agreed reporting program whereby the licensee/contractor demonstrates compliance behaviour via “standard” reports.
2. An inspection program undertaken by the regulator/purchaser used to assess integrity of the “standard” reports.

² See also Sann, A., “Seeing Energy in a New Light”, Proceedings of the 2002 Australian Pipeline Industry Association Convention, APIA Website. This paper argues for an objective-based approach to regulation in preference to prescriptive legislation.

³ The prescription of AS 2885 is in keeping with a commitment of the Council of Australian Governments (CoAG) which, on 25 February 1994, agreed “to adopt AS 2885 to achieve uniform national pipeline construction standards by the end of 1994 or earlier.”

⁴ The objectives of the South Australian Petroleum Act 2000 are typical of those which exist in most State legislation in Australia. These are

- Minimise risks to the public and pipeline personnel
- Minimise environmental damage
- Maximise security of supply

The objectives of AS 2885 are exactly the same – *“This standard exists to ensure the safety of the community, protection of the environment and security of supply.”*

The level of inspection required to assess the integrity of “standard” reports will largely be driven by:

- the level of trust established between parties (developed on the basis of demonstrated performance); and
- the due diligence requirement of regulator/purchaser.

The use of these instruments to assess the effectiveness of procedures is particularly important where the outcomes of processes are not immediately evident. For example, the effectiveness of right-of-way rehabilitation processes may not become evident for a considerable time after construction. Similarly, the fact that a company has no record of public safety incidents is no guarantee that systemic shortcomings that increase the probability of public safety incidents are not present.

Therefore, both parties need to work together to identify effective means of providing assurance that past good performance (ie. achieving agreed outcomes) is a result of sound management practice and is likely to continue into the future. Generally, this will involve demonstrations of the *existence, effectiveness and implementation* of procedures.

PIRSA’s approach is to drive as much as possible onto the licensee – it is the licensee’s responsibility to demonstrate compliance with agreed stakeholder objectives are being met (including the use of audits and inspections). However, such demonstrations are not required to be made to the regulator alone. Companies also need to demonstrate this to themselves, their board, their shareholders, their financiers and their insurance companies. The regulator’s role is to act in the interest of the community and independently test and challenge the information which forms the basis of these demonstrations of compliance. While it is true that different external pressures (political, community focused) force the regulator to ask different types of questions at different times to those asked by boards and management (financially driven), as a general rule regulators are simply asking for no more than a demonstration of good business practice.

A positive side-effect of this arises from the fact that information and decisions which may be subject to independent scrutiny are more likely to be robust and reliable. Placing positive pressure on best-practice behaviour by intelligent scrutiny of information presented as demonstration of compliance constitutes another role of the regulator.

What happens when rules are broken?

An effective contract requires that there are clear and appropriate penalties when breaches occur.

It is the view of PIRSA Petroleum that, when a non-compliance occurs, the primary objective is to return to compliance and not simply punish the non-compliance (ie. influence good behaviour, not simply punish bad behaviour). Fundamental to this compliance strategy is the focus on requiring the licensee to demonstrate that it has taken steps to make corrections to the management systems which have allowed the non-compliance in the first place, to ensure that similar non-compliances will not reoccur. Punitive measures are seen as a last resort when all other compliance enforcement strategies have failed.

PIRSA Petroleum has articulated a compliance policy which clearly states what action is taken under what circumstances⁵ (see also Attachment 1). As with any contract, the action taken under the compliance policy will also account for factors such as the gravity of the breach and the compliance history of the contractor.

CONCLUSIONS

Factors which dictate regulatory style

The foregoing discussion has attempted to draw parallels between the regulatory role and the role played by any enterprise when it is required to act within the bounds of a contract (as either the purchaser or contractor).

Although the broad framework of contract relationships are relatively consistent, companies which are engaged in a number of contracts will attest to the fact that every contract relationship is different, depending factors such as the culture of the organisations involved and the individuals acting on behalf of those organisations.

Similarly, while the objectives and features of different regulatory regimes are generally the same, there is no one correct regulatory approach, and the regulatory approach will depend on a number of factors, including:

- The legislation (including the balance of *objective* and *prescriptive* elements)
- The underlying regulatory philosophy
- The regulator's perceptions of "market failure".
- The regulator's understanding of its own roles and responsibilities
- The regulator's perception of the risk associated with the licensed activity
- The political environment (created by the government, the media and the public)
- The regulator's confidence in licensee
- The performance history of industry and company
- The technical competence of regulator
- The resources available to the regulator

The role of the regulator

The role of the regulator is primarily that of the agent of the community, acting to ensure that those objectives which are susceptible to market failure are indeed achieved.

The challenge for the regulator is to ensure that it does not adopt responsibilities which lie with the licensee, but rather to gain assurance that the licensee has discharged those responsibilities (and is seen to demonstrate that this is so). As stated above, it is not the job of the regulator to tell the licensee how to do its job, but is the regulator's job to find out that the job is being done.

To achieve this, the regulator's role is to:

- Focus on outcomes
- Address market failure issues

⁵ Morton., J. "Development of a compliance policy for the Petroleum Act 2000", MESA Journal 27, October 2002

- Develop effective compliance monitoring strategies by which the licensee can demonstrate that outcomes are being achieved.
- Place positive pressure on best-practice behaviour by intelligent scrutiny of information presented as demonstration of compliance (ie. ask hard but pertinent questions)
- Enforce *effective* compliance strategies which encourage ongoing compliance via robust company management systems rather than simply punishing non-compliance.
- Continually question regulatory philosophy and approach.

In carrying out this role, the regulator is continually seeking to find the best balance between issues such as objective-based and prescriptive approaches; the level of scrutiny required to gain assurance that the licensee is meeting its obligations; and sometimes the conflicting objectives of industry, its political masters, and the community at large.

Challenges

The discussion regarding the role of the regulator is an ongoing one, and is one of the drivers for the 2003 APIA Technical Regulation Seminar. However, it is often doubtful that the discussion is conducted within the framework of a coherent, clearly articulated philosophy of regulation. Disagreements over the role of the regulator generally relate to specific grievances rather than the governing principles. The debate is poorer for this.

The challenge lies with both government *and* industry to articulate and test their philosophy of regulation.

This requires industry to acknowledge the legitimate role of regulation, and try and better understand how and why regulators in different jurisdictions behave as they do. As this paper has attempted to show, industry is probably in a better position than it thinks to form a regulatory philosophy, because “we are all regulators”. Indeed, regulators have much to learn from industry, as industry has considerable experience in managing issues similar to those faced by industry.

Similarly, it is incumbent on those of us who are regulators to continually challenge our role, and question how this is best carried out. Questions such as “Why regulate?” and “How does this approach achieve the regulatory objectives?” should be revisited regularly. This places us in a better position to engage with industry, but also to better contribute to the development of more effective legislative regimes, to ultimately better serve industry and the community at large.

ACKNOWLEDGMENTS

Much of this paper summarises thinking and work carried out by the PIRSA Petroleum Group over the past 10 years as we have grappled with the issue of the role of the regulator. Terry Aust, Michael Malavazos and John Morton have been the major contributors to this work, much of which can be found in various papers on the Petroleum Group website (www.petroleum.pir.sa.gov.au). In particular, Michael Malavazos has been the chief sounding board for the ideas put forward in this paper. Tony Williams of GPA Engineering is also thanked for useful contributions regarding the similarities between the role of the contract manager and the regulator. Any shortcomings however, lie with the author.

ATTACHMENT

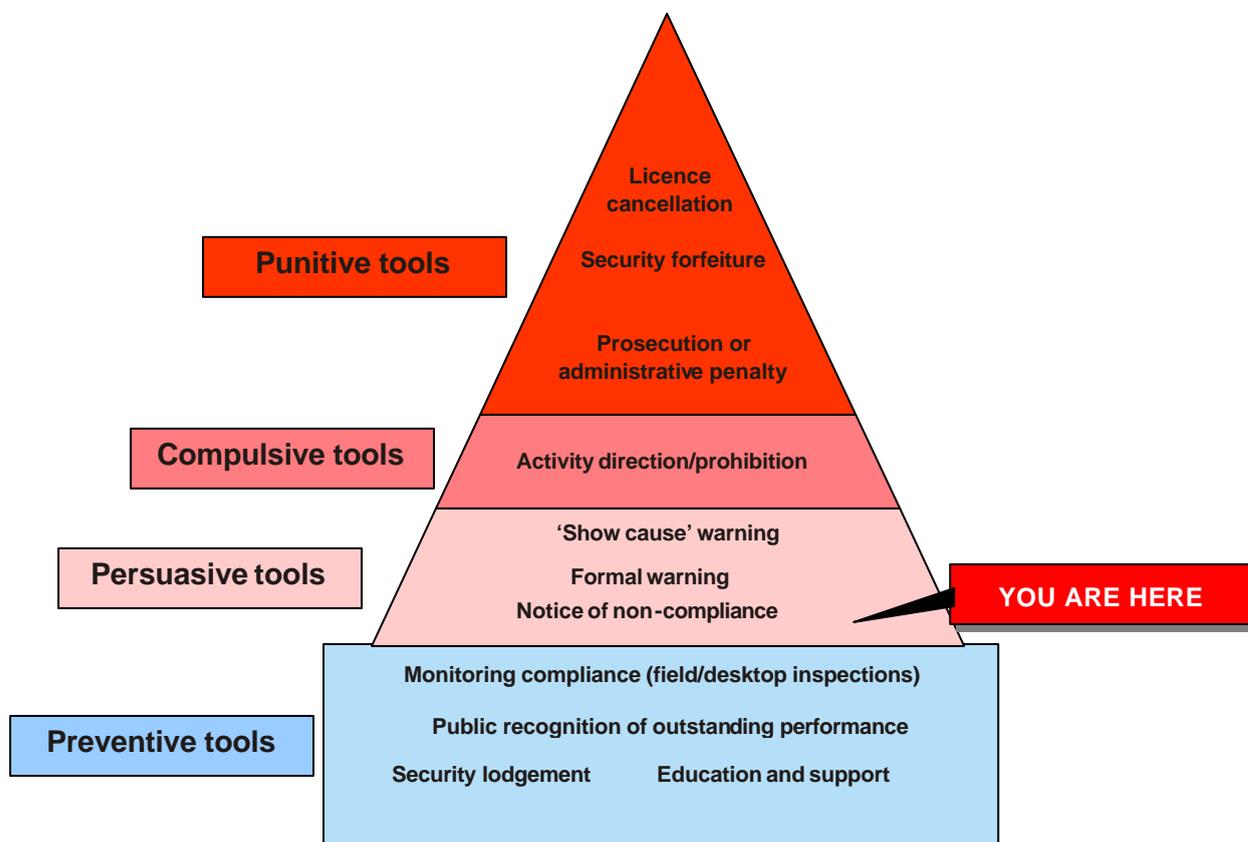
Compliance Enforcement Policy⁶

Petroleum Act, 2000

PIRSA have implemented an enforcement policy for the Petroleum Act, 2000, using the range of enforcement tools available under the Act. These tools will be applied in sequence of increasing severity if a licensee does not achieve compliance with lower level tools, with the most severe punitive tools being used only rarely, and education and guidelines being used the most (the enforcement pyramid).

The basis of this system is that you, the licensee, are aware of a consistent and transparent response to continuing non compliance by PIRSA, and it would be expected in most cases licensees would be able to avoid imposition of severe penalties

Your current position on this enforcement pyramid, for the non-compliance outlined in this letter is:



Preventive enforcement tools

Education and support

It is the primary responsibility of the Licensee or individual to comply with regulatory obligations. To assist this, education of licensees and major contractors, guidelines and verbal advice may be given by PIRSA to enable licensees to fully understand what the regulatory obligations are before the

⁶ This policy is current as at 09 May 2003, but is currently the subject of a consultative review process.

activity is undertaken. If requested by the Licensee, PIRSA may advise Licensees on whether or not a draft document proposed to be submitted to PIRSA is likely to result in compliance with the Act.

Security Lodgement

Currently it is policy that Licensee to lodge a security of \$50,000 to cover obligations arising under the Licence. This security is required to be lodged prior to entering any year in which seismic acquisition or well drilling or other on-the-ground activities are planned. The licensee should be fully aware that non-compliance might put this security at risk.

Recognition of outstanding licensees

PIRSA will publicly recognise the names of those licensees who have demonstrated outstanding motivation and performance to comply during the year. This recognition will not be for the "best" performer, but will be given to all licensees who meet a high level of compliance and can demonstrate a high commitment and motivation to comply.

Persuasive enforcement tools

A 3 step warning process is used to persuade non-compliant licensees that failing to take action to correct non-compliances will result in more severe consequences. These persuasive tools are most likely to be used for low-level breaches of the Act and Regulations, where public harm results more from the frequency of the non-compliance rather than the seriousness of individual breach. Where the non-compliance is of a nature such that further non-compliance cannot be tolerated, the "show cause" notice may be given in the first instance

Notice of non-compliance

This notice clearly identifies the nature and time of non-compliance detected, and requests that the licensee detail the events leading to non-compliance and actions intended to be taken by the licensee to correct non-compliance and prevent a recurrence.

Formal Warning

Following detection of a similar non-compliance a formal written warning will be issued, which notes the non compliance, refers to the earlier "Notice of non - compliance", warns of consequences of further non-compliance and formally requests an appropriate forward plan (with milestones) that will lead to the licensee becoming compliant.

"Show cause" Warning

Following a further detection of similar non - compliances the Licensee will be requested to show cause why one or more of the following compulsive or punitive tools should not be applied:

- Direction to cease or undertake specific activities to rectify non - compliance
- Prohibit further activities of the type resulting in the non-compliance
- Imposition of the appropriate penalty
- Prosecution for the offence (civil/criminal)
- Cancel the licence

The Licensee may avoid punitive action if they can demonstrate to PIRSA that they have already taken significant action that is likely to result in compliance at the next occurrence of the activity, and that where possible, previous non compliances have already been corrected.

The "show cause" warning will also be sent to all licensees, not just the operator.

Compulsive enforcement tools

Directions

Under various sections of the Act, Directions may be issued to Licensees to carry out specified obligations under the Act or to cease activities that are contrary to the Act. The Licensee may be prosecuted for non-compliance and be fined up to \$120,000. The Government may recover the cost of fulfilling the obligation as a debt.

Restrictions on activities

Under Section 105 of the Act licensees be prohibited or restricted in undertaking activities if the Licensee has failed to meet the criteria for good environmental performance included in the Statement of Environmental Objectives for the activity. The Licensee may be prosecuted for non-compliance with the restriction and be fined up to \$120,000.

Punitive enforcement tools

Security forfeiture

As noted above, all licences where regulated activities are carried will have a security lodged against them, generally \$50,000 per licence.

This security will be called upon when either

- A licensee has failed to comply with a direction, and the security may be used by the State to remedy the non-compliance; or
- A licensee is in breach of licence work program conditions and the licence is to be cancelled.

Administrative and other penalties

Various penalties may be imposed under the Act, including “Administrative Penalties” for defined offences. Administrative Penalties are imposed without recourse to a court, (similar to fines levied on drivers detected exceeding the speed limit) and may be up to \$10,000 plus up to a further \$1000 a day if the offence continues.

Prosecution

The main deterrent value of pursuing prosecution is not the amount of fine that may be imposed (maximum \$120,000) but the public attention that is drawn to a licensee’s poor compliance, and would be considered where there is significant public outrage at the non compliance (ie significant environmental damage), such that further non compliances could not be tolerated.

Licence cancellation

Licence cancellation represents the most severe penalty available under the Act, and would normally only be used for exploration licences.