

Compliance, Enforcement and Innovation

**Neil Gunningham,
Professor, Regulatory Institutions Network and School of Resources, Environment
and Society, Australian National University¹**

This paper explores government approaches to ensuring environmental compliance. In particular, it explores a variety of approaches with the greatest capacity (i) to achieve compliance (as distinct from enforcement), (ii) that are easily enforceable (administrative efficiency and effectiveness) and (iii) which promote innovation on the part of regulatees.

1. A Context: The Shifting Regulatory Landscape

In the continuing trend of lower taxation regimes in economically advanced states, many regulatory agencies have suffered budget cuts since the 1980's. The resultant diminished power and resources of government regulators, has seen others move into the vacated regulatory space. Environmental NGO's, commercial third parties, and business and industry self-regulators, have become important players in environmental regulation. For example, environmental NGOs, have become stronger and more effective and have sought not only to lobby governments and to pressure industry directly, but also to influence consumers and markets through strategies such as orchestrating consumer boycotts or preferences for green products. And in the realm of commercial third parties the example is the banks and insurance companies who seek to minimise their financial risk by scrutinising more closely the environmental credentials of their clients.

What has evolved is not a retreat of the regulatory state and a return to free markets but rather a regulatory reconfiguration which requires a continuing government role. What are the implications for compliance, enforcement and innovation? This question cannot be answered in the abstract. Much depends upon the nature of the environmental challenge, upon the sorts of entities being regulated and upon the political, economic and social contexts. In the space available, three different types of environmental problem are examined to illustrate how compliance, enforcement and innovation challenges might best be addressed in different contexts.

2. Regulating Large Companies

Most large companies have long term business plans and complex systems of controls designed to manage business and legal risks, including environmental management systems (EMSs). Equally important are large companies deep pockets, and sensitivity to adverse publicity. Therefore in most industry sectors (some large laggards remain) many large companies operate "beyond compliance" (Gunningham, Kagan, Thornton 2003). Strategies for regulating large enterprises in ways that maximize compliance, minimize the costs of enforcement and encourage innovation on the part of the regulated enterprise, must take account of the crucial characteristics of such organizations.

¹ Address for correspondence: neil.gunningham@anu.edu.au

2.1 Instruments and strategies

Based on research in North America and Australia (see Gunningham and Sinclair 2002, Ch 6 for an overview) it is suggested that the most promising options include:

Load based licensing and other Market Based Instruments. Traditional licensing, which focuses on pollution concentrations, does not reward ‘beyond compliance’ nor does it reward innovation. In contrast, load based licensing focuses on the total amount of pollution emitted each year. The annual license fee is calculated on the potential environmental impact of that pollution, not on concentration levels. The result: the lower the potential for environmental impact, the lower the fee, giving polluters continuing incentives for innovation and for reducing pollution. Compliance costs are modest since the system is based substantially on continuous monitoring and self-reporting together with external audits.

Environmental Improvement Plans involve (i) a process-based approach in which an enterprise is encouraged to examine systematically its environmental impact and means of reducing it and to commit itself to an improvement plan, and (ii) a tripartite approach in which the local community is directly involved (together with the regulator and perhaps local government) in the negotiations which result in the enterprise committing itself to environmental targets under the Plan. This approach has been very successful in engaging industry directly and in improving environmental performance. It may also reduce the regulatory resource burden since the community is actively involved in ‘policing’ the agreement. Since the agreement is a negotiated one, industry itself has an incentive to develop least cost solutions and ‘win-win’ outcomes (Gunningham and Sinclair 2002, Ch 8).

Regulatory Flexibility: A trend, most evident in regulatory flexibility initiatives and proposals for two-track regulation (in the USA, Project XL, Performance Track etc) is to reward and facilitate large enterprises for going beyond compliance, by providing them with considerable autonomy and flexibility and other incentives but subject to certain safeguards. Rather than the state policing and enforcing directly, the latter involve attempts to “lock in” continuous improvement and cultural change by requiring ‘green track’ firms to implement an environmental management system, the use of third party independent auditors rather than government regulators to monitor that system and transparency and community dialogue requirements which facilitate community and environmental groups also playing a role both in critiquing and monitoring firm performance.

While this approach has considerable attractions in terms of rewarding ‘beyond compliance’ behaviour, in minimizing the enforcement burden, and encouraging innovation, the results of the USA regulatory flexibility initiatives have so far been disappointing. Whether this is due to inherent flaws in this approach or more to design faults, remains unclear. Are the skeptics correct in questioning why so many resources are being devoted to making the top 20% (or perhaps only the top 5%) even better, rather than concentrating on the most serious problems or on under-performers?

Sustainability Covenants facilitate and encourage large corporations who are already comfortably discharging current regulatory requirements, to achieve sustainable production. They are voluntary agreements that companies, industry associations and other organizations can enter into with Victorian Environment Protection Authority to identify the means by which the business can improve its resource use efficiency and reduce its ecological impact. It is only if a proposed covenant is, or is likely to be effective in meeting one or other of these aims that VEPA will become a signatory to it. Sustainability covenants, according to the VEPA in Australia, are intended to take advantage of “paradigm shift in thinking about the environment [which] is now often a catalyst for commercial innovation rather than a barrier for economic development”. Given this shift, the role of the regulator is to be a facilitator and foster the intellectual capacity and motivation on the part of industry to implement dynamic and flexible solutions to environmental problems and to embrace the broader sustainability challenge.

Operator and Pollution Risk Assessment A risk based approach is another means of rationally allocating resources. The UK Operator Pollution Risk Appraisal (OPRA) approach, for example, involves the agency in ranking a site in terms of both the risk it poses to the environment and also for the management systems that are in place to control the risk. The total of these scores make up the site’s OPRA score, which indicates the overall risk it poses to the environment. By comparing OPRA scores the agency is able to take a risk-based approach to prioritizing the regulation and monitoring of sites.

Enforceable Undertakings are an Australian innovation successfully utilised in the areas of consumer protection and corporations. Enforceable undertakings are the result of negotiations, where an organization that is believed to be in breach of the law, offers to the regulator an undertaking to take certain action, and if accepted by the regulator, the undertaking is enforceable in court. This process allows for innovative, flexible and efficient solutions to breaches, and introduces restorative justice to regulation – empowering the regulatee as well as the regulator (Parker 2004). The broad types of obligation provided in enforceable undertakings apply well to environmental regulation i) promise to cease the unlawful conduct, ii) measures to protect against recurrences of the misconduct, and iii) remedial action to address any harm caused (Longo 2000).

2.2 Frameworks and Lenses

Below we examine two frameworks, or lenses that may enrich our understanding of individual policy instruments, and what they might achieve.

Corporate Environmental Behaviour and the License Model

The License Model (Gunningham, Kagan and Thornton 2003) views business enterprises as simultaneously motivated and constrained by a multi-faceted “license to operate,” that includes not only the terms of their regulatory permits and legal obligations, but also an often-demanding “social license,” and a constraining “economic license,” which represent the demands of social and economic actors respectively.

These regulatory, economic and social license requirements are monitored and enforced by the stakeholders who generate them, and who commonly seek leverage by exploiting a variety of license terms. For example, environmental groups not only enforce the terms of the social license directly (e.g., through shaming and adverse publicity) but also seek to influence the terms of the economic license (e.g., generating consumer boycotts of environmentally damaging products) and of the regulatory license (e.g., through citizen suits or political pressure for regulatory initiatives). Thus the *interaction* of the different types of license often exceeds the effect of each alone. The terms of some legal license provisions extend the reach and impact of the social license by directly empowering social activists or by giving them access to information or a role in the permit-granting process which they can use to pressure target enterprises. Conversely, a company which fails to respond appropriately to social license obligations risks a tightening of its regulatory license, as frustrated community activists turn for help to politicians and regulators.

Policy insights emerging from this work include (i) technology based regulation, at least in this industry, was very effective in reducing pollution and arguably efficient in doing so, since a ‘one size fits all’ approach was appropriate to the circumstances of the industry. The anticipation of tougher regulation also provided incentives to search for innovation and to minimise costs. (ii) Social license was very important and its effect can be amplified by government intervention to: empower communities, provide information and otherwise strengthen the reach of civil society.

The role of Meta-Regulation

The capacity of the regulatory state to deal with increasingly complex social issues has declined dramatically. There is a limit to the extent to which it is possible to add more and more specific prescriptions without this resulting in counterproductive regulatory overload (Teubner, 1983). To give a concrete example, one cause of the TMI nuclear accident and near melt-down, was that operators simply followed rules, without any capacity for strategic thinking, and as events unfolded which were not covered by a rule, they had no capacity to read the situation and respond appropriately.

In contrast, reflexive regulation, which uses *indirect* means to achieve broad social goals, has, according to its proponents, a much greater capacity to come to terms with increasingly complex social arrangements. This is because it is procedure oriented rather than directly focused on a prescribed goal, and seeks to design self-regulating social systems by establishing norms of organisation and procedure. Such a strategy can also be viewed as a form of “meta risk management” whereby government, rather than regulating directly, risk-manages the risk management of individual enterprises. For example, the safety regime established for the nuclear power industry, post Three-Mile Island, ceased to be primarily about government inspectors checking compliance with rules, and more about encouraging the industry to put in place safety management systems which were then scrutinised by regulators, and in this case, by the industry association in the form of the Institute of Nuclear Power Operations.

Under this approach, which is most developed in Christine Parker's *The Open Corporation*: "the role of legal and regulatory strategies is to add the 'triple loop' that forces companies to evaluate and report on their own self-regulation strategies so that regulatory agencies can determine if the ultimate objectives of regulation are being met." Such a government role is crucial because while companies may have the potential for effective self-regulation they do not necessarily have either the incentive to engage in this approach nor the systems in place to ensure that it is effective. The EU regime regarding Major Hazard Facilities (COMAH 2 is one example). The role of safety and environmental management systems and of risk management, subject to accreditation and oversight by skilled regulators, is central to such regimes.

3. Regulating Small and Medium Sized Enterprises (SMEs)

The effective regulation of SMEs is a substantial policy challenge for environmental agencies in all jurisdictions, not least because this group has a number of characteristics that inhibit the application of conventional regulatory measures. These include: a lack of resources (exacerbated by higher compliance costs, a shortage of capital and economic marginality); a lack of environmental awareness and expertise (many are ignorant of their environmental impact, technological solutions to their environmental problems, or their regulatory obligations); and a lack of exposure to public scrutiny and adverse publicity. Moreover, the sheer numbers of such enterprises leads to very infrequent inspections.

In the case of SMEs, there is more scope for negative incentives through environmental regulation than through positive incentives (Gunningham and Sinclair 2002, Ch 2) though here, it is important to identify mechanisms that are not overly demanding of government resources, and targeted to the specific circumstances of SMEs. In this context, three instruments have particular merit.

Self-inspection and self-audit: Self-inspection and self-audit has considerable potential in the context of SMEs. Briefly, this entails a SME manager applying a pre-set checklist of measures (usually tailored to different industry sectors) to determine if their premises are achieving a basic level of environmental good practice. The aim is to foster a basic level of regulatory compliance and good environmental behaviour as opposed to continuous improvement and excellence. In order to minimise the burden involved, and motivational fatigue, the list is confined to a limited range of issues (for example, the top four pollution issues in a particular sector).

The potential benefits of self-audit and self-inspection is demonstrated in the case of the printing industry of Minnesota, in the United States. Here, SMEs are encouraged to self-inspect, and to report results to the regulator, by being afforded limited statutory protection from enforcement action. Participating firms are also awarded a "green star" on the completion of an audit. In addition, the relevant industry association has taken the approach a step further by providing auditing services to its members in order to develop site-specific compliance plans. A failure to commit to the plan results in removal from the scheme. *A crucial inducement to participate in the self-audit is a preceding letter sent by the regulator which implies that non-participants will be a high priority for inspection*

and, in the event of breach, enforcement action. In Massachusetts, this inducement to participate and take the self-certification seriously was added to by making owners or managers personally responsible for complying with environmental regulations.

Harnessing Supply Chain Pressure In many sectors there are massive disparities of commercial power along the supply chain that can be harnessed in the interests of environmental protection. Larger firms, in particular, may be able to impose product and process preferences on other firms, using their market power to influence the behaviour of upstream suppliers and downstream buyers. Supply chain pressure thus offers a valuable means of influencing the environmental behaviour of SMEs. And given the difficulties government faces in regulating SMEs directly, it may prove to be an important and effective complementary strategy.

There are a variety of roles that government can play in encouraging, facilitating and rewarding large companies to be more proactive in exerting pressure on the SMEs who are their customers. It might for example: exert its own supply-chain pressure through its procurement policies; make this a condition for the granting of regulatory flexibility; encourage larger firms to form partnerships with smaller buyers and suppliers and provide public recognition to those who do so; hold this out as an important feature of environmental best practice models; insist upon such a requirement directly in legislation; or require such efforts to be articulated in corporate environmental reporting.

Using surrogate regulators: Sometimes government's capacity to regulate SMEs is very limited but there is a credible third party who may be harnessed to play a surrogate regulatory role. For example in the Australian State of Victoria, vehicle repairers (who in aggregate cause extensive pollution) have been encouraged to engage in voluntary initiatives (EMS and 'Clean Green Body Shop') but these have had limited success. However, when the State's major vehicle insurer was persuaded to insist that it would only contract with vehicle repairers which complied with the EMS/Clean Green Shop initiatives, then substantial compliance was achieved.

Neighbourhood Environmental Improvement Plans: NEIPs (introduced in the Australian state of Victoria) are designed to foster local community involvement in and control over environmental issues relevant to their neighbourhood. NEIPs involve a series of steps, including: (i) a process of public consultation; (ii) identifying a shared vision of the most important environmental issues; (iii) establishing a steering group to oversee the NEIP; (iv) engaging partners, such as business and community groups, and landlords of industrial estates to build consensus and commitment; and (v) preparing a draft proposal. Key requirements include, inter alia, that it must: specify the area covered; be consistent with relevant environmental protection policies; provide for the monitoring, compliance and reporting of agreed outcomes; include consultation with affected parties; and provide for review and evaluation.

NEIPs are deliberately broad in scope in that they can apply to a range of environmental issues, and they are designed to facilitate the engagement of both residents and businesses. They may be particularly useful when there are multiple sources of pollution and where a joint effort is required to develop and implement solutions. For example,

stream water quality may be affected by litter, the impacts of erosion from building sites, or householders or businesses putting wastes into drains (EPA Victoria, (2002)).

4. Regulating Agricultural Non-point Source Pollution

Non-point source pollution is one of the most serious water quality problems confronting many jurisdictions, and agriculture, the most substantial contributor to it. Controlling such pollution presents a very considerable policy challenge because, by definition, pollution from diffuse sources cannot be readily identified and measured as it leaves a landholder's property. Moreover, it is caused by a diversity of different practices and land uses, it enters the water system in a number of different ways, and its impact is mitigated by weather conditions, soil type and a variety of other factors, not all of which are fully understood. Against this backdrop, how should environmental law and policy address non-point source pollution from agriculture.

Perhaps because of its complexity and political sensitivity, policymakers have chosen to address this issue largely through voluntarism and other forms of exhortation. However, while politically acceptable, such approaches have been manifestly unsuccessful in achieving change. Elsewhere, it has been argued that what is required is not only the establishment of credible pollution targets, time frames, and assessment criteria, but also the development a range of policy instruments which are demonstrably effective, and deliver acceptable trade-offs in terms of efficiency, equity and political acceptability (Gunningham and Sinclair, 2004).

This implies matching the type of standard with the context in which it is to be applied, and developing a blend of positive and negative incentives, underpinned by coercive mechanisms in some circumstances. There is value in applying a *range* of policy instruments under each of three broad categories: farm management practices, landscape changes, and land use patterns, in order to engage with different facets of the problem. There are particular virtues in the use of process based standards under the first of these categories (environmental management systems, farm management plans, Best Management Practices etc), specification standards under the second (eg buffer zones by waterways 50 metres wide, limits on fertiliser application) and of broad scale planning and development control strategies under the third.

Dealing with the inevitable trade offs between cost-effectiveness, equity and political acceptability raises a particular challenge, which might be dealt with through a phased approach, engaging a diversity of mechanisms to deal with different aspects of this complex environmental challenge. In the first instance this relies on a complementary package of measures based on positive inducements (eg subsidies and auctioned grants) in recognition of the political and cultural difficulties in achieving the desired change and of imposing it on a resistant and politically powerful rural constituency. Ultimately, however, if these measures demonstrably fail to meet agreed performance outcomes at catchment and sub-catchment level, then a more interventionist mix of measures is demonstrably justified, including the use of negative incentives and direct regulation. (Source Gunningham and Sinclair (2004).

5. Conclusion

The limitations of each of the major policy innovations, and of the conceptual frameworks that drive next generation regulation, lead to a plea for pragmatism and regulatory pluralism. Notwithstanding some encouraging results, none of the policy instruments or perspectives examined above work well in relation to all sectors, contexts or enterprise types. Each has weaknesses as well as strengths, and none can be applied as an effective stand alone approach across the environmental spectrum. In part, such a conclusion suggests the value of designing complementary combinations of instruments, compensating for the weaknesses of each, with the strengths of others, whilst avoiding combinations of instruments deemed to be counterproductive or at least duplicative. This indeed was the central message of our previous work, embedded within the pluralist perspective (Gunningham and Grabosky, 1998, Gunningham and Sinclair 1999; and Gunningham and Sinclair 1999a). From this perspective, no particular instrument or approach is privileged. Rather, the goal is to accomplish substantive compliance with regulatory goals by any viable means using whatever regulatory or quasi-regulatory tools that might be available, in ways that facilitate compliance, at least administrative cost, and in a manner that encourages innovation.

References

- Gunningham N, R Kagan and D Thornton *Shades of Green, Business, Regulation and Environment* Stanford University Press, 2003, 206 pp.
- Gunningham N and D Sinclair *Leaders and Laggards: Next Generation Environmental Regulation* Greenleaf Press, UK, 2002, 204 pp.
- Gunningham N and P Grabosky *Smart Regulation: Designing Environmental Regulation*, Oxford University Press, 1998, 492 pp
- Gunningham N and D Sinclair “Curbing Non-Point Source Pollution: Lessons from the Swan-Canning” 21 *Environmental and Planning Law Journal*, 2004, 181-199
- Parker C, *The Open Corporation*, Cambridge University Press, Cambridge, UK, 2002.
- Parker C, ‘Restorative Justice in Business Regulation? The Australian Competition and Consumer Commission’s Use of Enforceable Undertakings’ 67 *Modern Law Review*, 2004, 209-246
- Longo J, ‘Enforceable Undertakings: Quicker and More Flexible Regulatory Responses’ 16 *Company Director* 2002, 28-29