

Hazardous Substances Compliance System Findings Report

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Executive Summary

The purpose of our review is to recommend improvements at a system level to the hazardous substances compliance system to protect the environment, and the health and safety of people and communities. We have been tasked with analysing the hazardous substances compliance system, deciding whether it is fit for purpose, and recommending improvements.

1. Matters relating to the recent legislative changes under the Hazardous Substances and New Organisms Act 1996 (HSNO), the Health and Safety at Work Act 2015 (HSWA), or the Resource Management Act 1991 (RMA) are excluded from the scope of our recommendations. From our perspective these Acts are the core of the hazardous substances compliance system, notwithstanding there are other Acts at times in play. We are also not expected to propose changes to topics that are being considered as part of parallel reviews or planned reviews.¹
2. Our approach to this review has been to meet with a number of agencies and sector groups². Through this process we have gathered relevant information, analysed that information and tested our thinking about what is working well and what could work better with those agencies/sector groups. In making our recommendations, we have considered changes that can make a positive difference to the effectiveness and efficiency of the HSNO compliance, monitoring and enforcement system (CME). This includes both recommendations which do not entail regulatory change (non-legislative options) and those that will require legislative change.
3. The safe acquisition, use, and disposal of hazardous substances is critical to human health, our environment and the economy. This is not just because of the intrinsically 'hazardous' nature of these substances. It is also because of the benefits communities derive from hazardous substances; like fighting diseases that afflict us and our animals, protecting the nation's biodiversity, use in manufacturing, transport and in the whole economy.
4. HSNO's purpose is expressly focused on preventing or managing the adverse effects hazardous substances can have. Our approach to addressing the fitness for purpose question has been to look beyond that purpose and at how that Act defines a hazardous substance.
5. A fit for purpose compliance system must primarily enable the benefits to be derived from hazardous substances while preventing or managing the adverse effects of acquiring them, using them, and handling, transporting, storing and disposing of them. We also note the compliance system is really a CME. This is the language widely used nationally and internationally to describe the function of regulators, and so we adopt it.
6. From our review we have concluded the CME system is not fit for purpose. While some elements of the system are robust, such as the hazardous substances classification and approval regime, others are not.
7. Largely this is a result of a fractured regulatory system. The Environmental Protection Authority (EPA) regulates substances, various agencies oversee their transportation to where they are used, and responsibility then passes to multiple place-based regulators. There is very little regulation of volumes used and oversight of the disposal of hazardous waste is weak.

1 Including the review of the Health and Safety at Work (Hazardous Substances) Regulations 2017 to be conducted by MBIE and WorkSafe.

2 See list of participants at Appendix 2.

8. Hazardous substances CME responsibilities are dispersed among about 85 different entities. Whether these entities have a role to play is defined by where the hazardous substance happens to be - a workplace, ship, aeroplane, truck, dwelling, or public place. While HSNO sets out these roles and responsibilities (and some say this is clear) our finding differs, at least when agencies need to respond to incidents from initial response through to final clean-up.
9. In practice, the multiple agency and place-based arrangement clutters the landscape with regulators, creates confusion, and provides fertile ground for leadership and jurisdictional debates. There are challenges for the regulated also, for example in understanding the various agencies' roles and responsibilities.
10. There are performance problems among hazardous substances CME agencies. Concerns and questions have been raised, among others, about local councils' (territorial authorities (TAs)) performance, the role of district health boards, and the rationale for the functional split that occurred between the EPA and WorkSafe New Zealand (WorkSafe) as part of the (post Pike River Inquiry) Working Safer Reforms. This latter situation may be improving as WorkSafe builds capability and capacity to fulfil its roles. Issues remain, however.
11. In the recent past, the performance of the CME system has been adversely affected by the lack of well-trained, technically competent and available staff in the field. In other cases, the broader purpose of the hazardous substances CME (as we have described it) has not been aligned with one or other of the regulators' organisational missions or local priorities.
12. Two emergency incidents at Concours Electroplating (Timaru) and in Northland point to some shortcomings in the suite of tools the law gives the agencies, and also to a failure at a central and local government agency level to use those available to best effect. The shortcomings here may not relate solely to the provisions of HSNO but to the RMA also. Given that we don't know what else is out there, addressing the CME system's ability to deal with legacy issues must be a priority. We note legacy issues can also arise as a result of the banning of previously-approved substances, and these require a different approach.
13. A cohesive and collaborative approach is critical when responding to incidents. Different agencies tend to stick to their knitting, delaying the timeliness and effectiveness of responses. While hard evidence is lacking, anecdotally we remain concerned about the extent of, and effectiveness of, inter-agency cooperation.
14. Leadership in and of the CME system is lacking. This is because of the way the law defines roles and allocates powers. It is difficult, under the law, for an agency to take charge and for leadership to be effective. On the face of it, the EPA is the agency we would expect to have CME leadership responsibilities for hazardous substances. The law points to the EPA as having the leadership role to facilitate better coordination and cooperation between itself and the other agencies. However, it doesn't expressly have this duty nor the aligned powers in law.
15. Instead, the EPA has coordination of inspections, supervision of inspections roles, and the role of providing oversight of the level of enforcement carried out by other hazardous substances regulatory agencies. It has an implicit duty to gather information from CME agencies about their inspection and enforcement powers, but duty isn't backed up by the power to require the necessary information to be provided. It is also limited in its powers to take a more proactive enforcement role and in its ability to 'step in' and to fulfil its broader legal duty generally.
16. We consider the essential elements of a fit for purpose hazardous substances CME would include:
 - giving management of hazardous substances, their benefits and risks, a higher national priority strategically
 - decluttering the multiple regulatory agency and place-based response landscape
 - being absolutely clear about roles and responsibilities
 - creating a system leadership duty with the powers, coercive included, to perform that duty including emergency management
 - developing a cost-effective operational and service delivery model for the nation including greater national reach for the EPA
 - leveraging industry and trade-based organisations as an integral part of the system

- improving information management and flows (including hazardous substances 'track and trace', for example) across agencies and the system to ensure it is intelligence-led
- reviewing the regulatory interventions tool kit to ensure each agency has access to the full suite of measures to enable timely, proportionate, equitable, risk-based and cost-effective interventions
- using financial assurance instruments and applying the polluter pays principle to assign financial accountability
- recognising the need for industry and government contributions to be part of incident and remediation responses.

17. Our recommendations emphasise those matters. We also provide some observations on cost effective implementation in the areas of statutory and regulatory change, agency policy and practice, and operational performance.
18. It is beyond the scope of our work to recommend changes to the EPA/WorkSafe roles and responsibilities split. That noted, our strong view is that the hazardous substances CME system leadership gap needs to be filled. While we understand the rationale for and history behind the distributed nature of the hazardous substances CME roles, that is no reason to fail to address the need for system leadership. System leadership should not be left to chance, diluted nor distributed.
19. In our view, the EPA is the agency that should have that duty and the powers to perform it. We see better environmental and community well-being outcomes as the result, including some beyond those we have considered as part the hazardous substances CME system review. Once addressed, leadership needs to be backed up by strengthened delivery capacity through smart partnering and outreach by the EPA and WorkSafe especially.

Introduction

Overview of the review process

The purpose of this review is to recommend improvements at a system level to the hazardous substances compliance system to protect the environment, and the health and safety of people and communities. The role of the Technical Working Group (TWG) was also to analyse the hazardous substances compliance system; decide whether it is fit for purpose; and recommend improvements.

Terms of reference and report

The TWG was required by the terms of reference to:

- report on the effectiveness of the regulatory and legislative framework of the hazardous substances compliance system, including regulatory tools or enforcement actions and measures to enforce compliance
- determine the effectiveness of the operational systems for hazardous substances compliance by considering the roles played by the other enforcement agencies, how they work together, their focus and priorities
- clarify the broader social, financial, and other issues that influence non-compliance including at local government level
- identify which approaches taken by enforcement agencies in other countries, may be appropriate to New Zealand
- review data collection and reporting on the performance of the hazardous substances compliance system
- describe what is required to address situations where landowners are unable or unwilling to clean up sites.

The report of the TWG should:

- describe the current hazardous substances compliance system (the system)
- identify the strengths and weaknesses of the system and funding
- advise on whether the system is fit for purpose, supported by an analysis of the system's structural, operational, legal, leadership and resourcing aspects
- make recommendations on improving the system
- describe how the improvements may be implemented efficiently and cost effectively.

The review is not to make recommendations on the changes that were made to HSNO and the HSWA as part of the post Pike River Inquiry reforms. Neither is it to consider matters related to non-hazardous substances, reviews which are yet to get underway such as of the Health and Safety at Work (Hazardous Substances) Regulations 2017, nor examine how agencies make decisions about their operational priorities and undertake their regulatory functions.

Development Process for the Report

We have been supported in our work by an EPA secretariat. The EPA has provided administrative support, access to specialist advisers and to its procurement system for the external advice we have needed. The need for us to maintain independence in our work has been respected.

The EPA, Ministry for the Environment (MfE) and WorkSafe have provided us with relevant information. We were somewhat surprised no one appears to have described the hazardous substances system and its component parts in a way that can be readily communicated to others. Nor did we meet anyone who had a complete picture of it. That may be in part due to its inherent complexity.

We chose to define the system as being the laws (including regulations), the regulatory agencies policies, practices and performance that are in play throughout the life cycle of a substance; that is, from approval to disposal. Rather than use the word compliance in relation to the system, we prefer the phrase compliance, monitoring and enforcement, or CME. Those words encompass what is commonly understood to be the components of a regulatory compliance system nationally and internationally.

One of the challenges we faced in the review was the lack of quantitative data on the system's performance. We are acutely aware this report is light on hard quantitative evidence to back up our observations. That is not a result of our approach or rigour. As we note in a number of places, the system that regulates hazardous substances focuses on the substance in the first instance, and the place where it is used in the second. It does not regulate volumes used or require changes in location to be traced. The result is there is very little hard quantitative data available to anyone, especially at a systems level.

We have had to rely on discussions with regulators and users, on opinion and anecdote, and on international evidence of what happens elsewhere. Inevitably, this means our analysis has a stronger qualitative bias than we would have liked, but we would note conclusions based on qualitative evidence, good judgement and common sense have their own validity and should not be diminished or dismissed.

That is not ideal, but it is a product of the regulatory apparatus, not of our method of work. Unsurprisingly this is one important area on which we make recommendations.

As part of our information-gathering phase we carried out informal meetings with various organisations and persons (as per Appendix 2). We held targeted meetings with a range of representatives from industry and government and answered direct inquiries through the website. Due to the timeframe for delivery there was no ability to canvas views and experiences more widely.

The hazardous substances compliance or CME system is not static. At the time of our review, a number of system improvements and work programmes were taking place across agencies (for example, capacity building within the EPA Hazardous Substances (HS) Compliance team). While we have tried to maintain pace with those changes, it may be one or other of those initiatives has already remedied a system weakness we have identified, or indeed introduced other concerns we are not aware of. We expect our recommendations to be relevant and to be taken into account, nevertheless.

We provided a draft and final report to MfE and the Chief Executive Officer (CEO) of the EPA prior to any public circulation of this report. We reached an agreement with MfE and the EPA that their response to the draft would be limited to correcting any factual errors. We provided a similar opportunity to the other stakeholders in relation to their inputs only.

Introduction to Hazardous Substances & Management

What are hazardous substances?

Hazardous substances are chemicals or mixes of chemicals that can be explosive, flammable, corrosive, have a capacity to oxidise and/or be toxic to people and the environment. They include substances like petrol, solvents, fireworks, cleaners, cosmetics and even the ingredients of toothpaste.

Hazardous substances are important as they are used every day in homes, businesses, factories and open spaces. They are relied on for our economic, social, environmental and personal well-being. It is estimated over 200,000 different substances fitting the hazardous definition are in use in New Zealand.

The safe use of these substances relies on robust assessment processes for substances and sites where they are stored and used, as well as a fit-for-purpose compliance, monitoring and enforcement system. Some recent reports and incidences of non-compliance with the regulations for hazardous substances have highlighted the dangers these substances can pose to people and the environment when they are not properly managed. These reports and incidents suggest there is weakness in the hazardous substances system. The substantial costs to the Crown and local government in responding to these incidents, in remediating sites and safely disposing of hazardous materials, is also a concern.

MfE and the EPA decided to review the hazardous substances compliance system. Our independent Technical Working Group was appointed for that purpose.

Compliance, monitoring and enforcement system best practice

A compliance framework

In assessing whether the system for managing hazardous substances is fit for purpose, and in making recommendations to improve it, we have been guided by the literature on what a model structure should contain, and what framework it should be located within. There are a number of these best practice regulatory frameworks. We looked at five³, authored by the OECD, New Zealand's Productivity Commission, MfE, Treasury, and Professor Malcolm Sparrow.

We are not going to summarise these. This is not a treatise on regulatory practice illustrated by the example of the management of hazardous substances in New Zealand. It is about that system informed by commentaries on regulatory best practice. Several key concepts recur in those documents; the need for clear objectives, transparency, consistency, proportionality, understandability and alignment with supporting regulatory systems.

The Treasury document distinguishes between what a good regulatory system looks like and what constitutes good regulatory practice.

In summary, a good system:

- has clear objectives
- seeks to achieve them in a non-disruptive, least cost way
- is flexible and adaptable
- has processes that produce predictable and consistent results
- is proportionate and fair
- conforms with international standards and practices

³ OECD (2005), Productivity Commission (2014), Ministry for the Environment (2018), NZ Treasury (2017) and Sparrow (2000)

- aligns with related or supporting regulatory systems
- conforms to established legal and constitutional principles
- is easy to understand
- can evolve in response to changing circumstances and new evidence on performance.

Good practice, according to the Treasury guidelines:

- maintains a transparent CME strategy
- provides accessible, timely information and support to regulated parties
- provides effective ways for engagement
- publishes regular information on regulatory decision-making
- develops good working relationships with related regulators
- provides training, skills and supports to the frontline workforce
- builds capability within the state sector around common interests
- alerts Ministers and monitoring agencies to problems with capacity or legislation.

We are aware regulatory systems are not static. They need to be reviewed in line with experience about their efficacy. It is also a fact of political life that regulatory fashions change; from centralised authoritarian regulation, to deregulation, to devolved self-regulation, to industry self-regulation, to collaborative regulation and back again. The pendulum will swing.

Good practice does not require a robotic application of a prescriptive manual. It needs to be guided by a manual (or manuals), but applied with a human face, be well aligned with the broader public policy purpose of the controls, and balance the competing agendas associated with the exercise.

We were mindful of Professor Sparrow's admonition to:

- be less intrusive but more effective
- be kinder and gentler but don't let rule-breakers get away with anything
- focus efforts but be consistent
- process things quicker and be more careful next time
- deal with important issues but do not stray outside your statutory authority
- be more responsive to the regulated community but do not get captured by industry.

Regulation involves a complicated balancing act; balancing costs and benefits to the Government, the regulatory agencies, the regulated community

and wider society. Treasury expectations of best practice imply there is a need to:

- avoid organisational mission misalignment with statutory purpose
- be aware of officials' approach to the task at hand (such as preferring softly-softly, when it doesn't work or isn't appropriate)
- overcome compliance fatigue
- manage influence by superiors, be they official or political
- take a cautious approach to both advantages and disadvantages of third-party service providers
- identify any transactional biases (not my role, not my area of expertise, not on my watch)
- avoid close-knit relationships evolving into capture.

Monitoring performance

A final dimension of regulatory design is it needs to be mindful of goodness of fit with the ability to monitor compliance. The Treasury document creates an expectation that agencies will work collaboratively to monitor performance. All the organisations listed under s 97 of HSNO have substantial regulatory and enforcement powers under other legislation and authority to monitor performance. There is therefore no unitary framework that applies across the system.

There are six main monitoring methods that can be deployed.

Site visits

These are very expensive if they are to be comprehensive, because hazardous substances are ubiquitous. Limiting visits to high-risk sites can under-emphasise the importance of compliance with non-catastrophic exposures to hazardous substances that can have slow, but cumulative, adverse health effects.

Desk-top audits

Audits of self-reported information is cost effective in identifying potential targets for subsequent investigation (such as compliance with RMA consents), but without any comprehensive database of where hazardous substances are, this is not an effective monitoring instrument in the current regime.

Independent verification

This adds a cost dimension to site visits and requires some capacity for effective devolution of (contracted) inspection.

Data-matching and cross checking

This will require careful design, may involve profiling (which will have privacy implications), and requires robust data that is to be matched.

Responses to complaints

This tends to be the default monitoring mechanism for territorial authorities in discharging their HSNO obligations but is only a partial and selective monitoring tool unless built on a high-profile public awareness campaign about the risks hazards substances pose.

Proactive campaigns

Education campaigns followed by site inspections can be effective for particular substances but are unlikely to be a cost-effective instrument for the system as a whole.

Encouraging compliance

A final comment on how the literature informs our view on a fit-for-purpose CME regime relates to encouraging rather than enforcing compliance. The logic in jumping straight to enforcement action may not always have the best result (see Appendix 3).

New Zealand's regional councils have developed a Regional Sector Strategic Compliance Framework. Within that framework, there is a 4E model adapted from Zaman et al that encourages rather than compels compliance. The four Es are Engage, Educate, Enable and (ultimately) Enforce. It is worth exploring if this model can be adapted to complement other enforcement processes.

Overview of the New Zealand Regime

This section provides an overview of the current state of play for HSNO compliance in New Zealand. We briefly describe the relevant legislation and the roles of the different agencies. We note this system is complex and not static, and the information we set out is based on the situation at the time of writing. During our review, a number of changes were being progressed, for example:

- WorkSafe was building its capability and capacity as well as gearing up for its hazardous wastes (in workplaces) role
- Ministry of Business, Innovation and Employment (MBIE) is to review the Health and Safety at Work (Hazardous Substances) Regulations in late 2019
- the EPA had several process improvement projects underway including a global harmonisation project and a hazardous substances modernisation project
- amendments to the RMA were being mooted.

It is therefore possible the relative importance and overall relevance of our findings and recommendations may change in light of these. We then turn to setting out our expectations of what a good CME system might look like. In the next section we compare and contrast these expectations with reality.

Law

The path leading to the content of the current hazardous substances legislative regime provides important context to the work we have been charged with undertaking. As briefly summarised below, there is a continuing theme of reforms attempting to achieve greater simplicity in the hazardous substances regime, to reduce overlaps and gaps, and to provide certainty of role between agencies. It is clear from our work that significant challenges remain. There is further discussion of

this later in the report, where we consider there is a need to improve in delivering objectives in relation to the hazardous substances CME regime.

HSNO was intended to be a central part of a reform to streamline and update the management of hazardous substances and the way in which we screen new organisms for introduction into the country (Hansard, 1994). The Bill had been developed in response to reviews that had found the hazardous substances system characterised by overlaps and gaps (Hansard, 1994).⁴ Subsequent public consultation on proposals for the Bill had confirmed the perception of the (then) existing system was that the net effect was confusion about who was doing what, and therefore unnecessary cost (Hansard, 1994).

The fundamental approach of the Bill was “*to build from the hazardous substances control systems and the existing procedures for the assessment of new organisms*” (Report of the Committee, 1995). This has had a significant influence on the CME system for hazardous substances under current law.

In later parts of this section of the report we discuss the division of CME obligations for hazardous substances across specific agencies, as specified in Part 7 of the Act. We note, however, that section s 97 (which sets out the legal duties of relevant agencies to enforce the Act) and s 99 (which sets out the EPA’s duty to ensure the provisions of the Act are enforced) were not included in the original Bill. These important provisions were added in the Select Committee stage of the Bill. The additions were in response to concerns “*the bill was uncertain as to which agency would end up with enforcement functions in any particular sector (for example, civil aviation, health). This in turn led to concerns that present problems of gaps, overlaps, and poor accountability would continue into the new regime*” (Report of the Committee, 1995). While the changes to the Bill endeavoured to create that

4 The 1988 Final Report of the Inter-Agency Coordinating Committee *Pollution and Hazardous Substances Management* noted the need to rationalise the legislation covering Pollution and Hazardous Substances activities. Its mandate had been “*To establish the magnitude of the real, perceived, and potential problems in the management of hazardous substances ... to evaluate the strengths and weaknesses in the present management of hazardous substances, and to formulate an effective overall strategy for the future management of hazardous substances.*”

certainty, there was acknowledgement by MfE officials at the time that there was a tension between trying to provide certainty, while also trying to retain flexibility, which was essential to ensure the Act was enforced in an efficient and effective manner (Report of the Committee, 1995).

The most significant subsequent reform of the hazardous substances enforcement regime occurred in 2015. These changes were a result of the (post Pike River Inquiry) Health and Safety at Work reforms.⁵ The Regulatory Impact Statement for the Health and Safety reforms summarised the HSNO framework as follows:

“The Ministry for the Environment administers HSNO, including setting default controls on hazardous substances in regulations. The Environmental Protection Authority considers applications for individual hazardous substances, identifies their hazardous properties, sets controls as conditions to approval and produces guidance. MBIE administers the HSWA and is responsible for both compliance and enforcement relating to hazardous substances in the workplace (including compliance and enforcement of HSNO controls). Maritime NZ, the Civil Aviation Authority, NZ Transport Agency (NZTA) and the NZ Police enforce HSNO controls in their respective areas of responsibility.

The problem is that the regime for managing hazardous substances is complex and performing poorly. Evidence suggests that HSNO controls generally cover the right types of hazards and have the appropriate protection. However, there is significant non-compliance, with 75 percent of a sample of New Zealand businesses not fully complying with HSNO’s key risk management controls. Low compliance is likely to be due to:

- *the complexity of the HSNO regime, its slowness to amend legislation to reflect changes in best practice, and difficulty for duty holders in understanding how it interfaces with the HSE regime*
- *a lack of adequate education and guidance for end users*
- *a general lack of capability at all levels (the regulator, firms, workers’ representatives, workers)*
- *low frequency of inspections and monitoring*
- *a lack of adequate and graduated enforcement tools*
- *a lack of targeted prevention activities and incentives.”⁶*

Our findings are that many of these compliance weaknesses remain. We largely agree with the quoted description of agencies involved, save that it omits to include the roles of local and regional authorities. It is too early to say whether the 2015 reforms, which WorkSafe is still in the process of implementing, are delivering the intended HSNO CME benefits.

Having provided context to what has shaped the content of the hazardous substances CME, we now turn to an overview of key aspects of the legal framework.

Hazardous Substances and New Organisms Act 1996

The purpose of HSNO is to protect the environment and the health and safety of people and communities by preventing and managing the adverse effects of hazardous substances and new organisms (s 4 of HSNO). That overarching purpose is supported by two statutory principles relevant to the purpose of the Act, namely all persons exercising functions, powers, and duties under the Act shall:

- a. *Recognise and provide for two principles:*
 - i. *the safeguarding of the life-supporting capacity of air, water, soil and ecosystems; and*
 - ii. *the maintenance and enhancement of the capacity of people and communities to provide for their own economic, social, and cultural well-being and of the reasonably foreseeable needs of future generations (s 5 of HSNO).*
- b. *Take into account specified factors, including the economic and related benefits and costs of using a particular hazardous substance (s 6 of HSNO).*

We conclude the purpose and supporting principles and specified factors must also be the purpose of the CME system under the Act, at the highest level.

As we foreshadowed in our previous comments, HSNO imposes a legal duty on specified entities to enforce the provisions of the Act in specified places/situations (s 97 of HSNO).

Although HSNO is central to the regulation of hazardous substances, their use is also regulated under a relatively wide range of other Acts.

5 The Hazardous Substances and New Organisms Amendment Act 2015 being part of the Health and Safety Reform Bill 2015, implementing the recommendations of the Royal Commission of Inquiry into the Pike River Tragedy, containing these hazardous substances provisions, later separated out into its own Act.

6 Regulatory Impact Statement 1994 (<https://treasury.govt.nz/publications/risa/regulatory-impact-statement-improving-new-zealands-workplace-health-and-safety-system>).

7 <https://www.mfe.govt.nz/more/hazards/about-environmental-risks-nz/laws-help-us-manage-environmental-risks/how-hsno-act>.

MfE, which administers HSNO, has an excellent summary of the legislative matrix on its website.⁷ In addition there is a raft of sector-specific legislation and regulations.

Users of hazardous substances therefore need to be aware of, and structure their compliance programmes around, a mix of legislative and related requirements. For example, hazardous substances in the workplace must be managed in accordance with both the HSNO and the HSWA obligations. The use of a hazardous substance in workplace premises may also require a resource consent (conditions of which will need to be complied with) or be subject to rules in the district or regional plans governing discharges to land, air or water.

For the purpose of this review of the CME system, we are not confining ourselves to a review of CME solely in accordance with Part 7 of HSNO, we are also considering other Acts. We have set out the key features of the CME regime related to Part of HSNO in Appendix 4.

Health and Safety at Work Act 2015

The main purpose of the HSWA is to provide a balanced framework to secure the health and safety of workers and workplaces. The Act sets out the methods for achieving its purpose, including (in summary):

- a. *Protecting workers and other persons against harm to their health and safety by eliminating or minimising risks from work or high-risk plant; and*
- b. *Providing for fair and effective workplace representation; as well as worker and union participation; and*
- c. *Promoting the provision of advice, information, education and training; and*
- d. *Securing compliance with the Act through effective compliance and enforcement measures; and*
- e. *Scrutinizing and reviewing actions taken by persons performing functions or exercising powers under the Act; and*
- f. *Providing a framework for continuous improvement and higher standards of work health and safety.*

The HSWA defines hazardous substances in the same manner as HSNO and extensively refers to substances which include a hazardous substance. Section 212 of the HSWA⁸ provides for making comprehensive regulations relating to hazardous substances.

Resource Management Act 1991

The purpose of the RMA is to promote the sustainable management of natural and physical resources. Sustainable management means managing the use, development and protection of natural resources in a way or at a rate that enables people and communities to provide for their social, economic and cultural well-being as well as to provide for their health and safety.

The RMA contemplates:

- a. *the potential being sustained for natural and physical resources to meet the needs of future generations; and*
- b. *the life-support capacity of air water, soil and ecosystems being safeguarded; and*
- c. *the adverse effects of activities on the environment being avoided, remedied or mitigated.*

Persons exercising functions and powers under the RMA are required to provide for a range of matters of national importance (s 6) and to have particular regard for a range of other matters (s 7).

The RMA contains references to hazardous substances directly and by definition. For example, hazardous substances can be contaminants. The functions of territorial authorities and regional councils were amended by the Resource Legislation Amendment Act 2017 to exclude the function of preventing or mitigating the adverse effects of the storage, use, disposal or transport of hazardous substances.

Other relevant legislation includes the Fire and Emergency New Zealand Act 2017, Agriculture Compounds and Veterinary Medicines Act 1997 and the Health Act 1956.

⁸ The Health and Safety at Work (Hazardous Substances) Regulations 2017 are made pursuant to that section (and other sections of the HSWA). Those Regulations prescribe general duties of a "Person Conducting a Business or Undertaking" (PCBU) in relation to hazardous substances. They also impose a wide range of substance specific safety obligations and requirements relating to emergency response plans, tracking obligations and compliance certification (among other things). WorkSafe has responsibility for enforcing these Regulations.

Hazardous substances regime 2019

The complexity of the system and its associated feedback loops make it unrealistic to capture the system in a single explanatory diagram or flow chart. From our perspective the system has the following parts in no particular order:

- importation
- manufacturing
- approvals of hazardous substances
- packaging and labelling
- transportation
- storage
- use
- disposal
- management of hazardous waste.

It is not the intention of this report to articulate how all these functions work and interact with each other. It is relevant to note background material in regard to Hazardous Substance Modernisation Project (HSMoD) as the TWG were of the opinion this piece of work was a critical part of improving the current hazardous substances approvals system and aligning to international standards.

Hazardous substances modernisation project

The hazardous substance modernisation project (HSMoD) is a foundation programme being led by the EPA to modernise how hazardous substances are regulated, delivering a modern, innovative, and fit-for-purpose regulatory and compliance system. It involves updating the hazardous substances classification system, replacing the hazardous substances database, and reassessments.

Hazardous substances classification system

The Globally Harmonised System of Classification and Labelling of Chemicals (GHS) is the single internationally agreed system of chemical classification and hazard communication. Adopting the GHS is a binding obligation for OECD member countries. New Zealand's major trading partners all use the GHS.

The EPA intends to transition the New Zealand chemical classification system to the most up to date GHS and develop a new hazardous substances database to support it, by mid-2021. The hazardous substances databases attract the most traffic on the EPA website, and are the primary information repository for staff, applicants and potential applicants, and other New Zealand and international users.

Hazardous substances chemical reassessments

MfE and the EPA are currently undertaking to consider improvements to the reassessments system including improvements to the efficiency of the reassessments process and ways to apply information from trusted regulators (see Findings, Evidential Base of Regulation). This work has not been explored in this report due to the detailed work currently being undertaken in this area.

Agencies

In this section of the report we comment on the regulatory agencies' roles under HSNO. This is only a part of the hazardous substances management system as a whole. We make comments on the operational approaches they take to their work in a subsequent section of the report. We also provide comment on their roles and activities under other relevant Acts.

A range of agencies have specific mandatory and/or discretionary roles within the HSNO system, and CME is carried out in various ways. We provide a brief synopsis of how each agency appears to conduct its CME responsibilities, based on our observations. Table 1 summarises the role they are prescribed with respect to enforcement. As HSNO provides some agencies 'must' or 'shall' enforce the provisions of the Act, while others 'may' do so, we identify this difference in the table below.

Table 1. Part 7 of HSNO includes a complex sharing of enforcement responsibilities and powers among a number of agencies, with the EPA having overall responsibility to ensure all provisions are enforced (s 99(1) of HSNO).

Agency		Enforcement responsibility in s 97
WorkSafe	<i>(‘must’ mandatory)</i>	Provisions of the Act related to disposal and eco-toxic controls, and equivalent conditions in group standards issued under s 96B that relate to hazardous substances, in any workplace. Provisions of the Act in, on, or about any distribution system, gas installation, or gas appliance.
NZTA	<i>(‘may’ discretionary)</i>	Provisions of the Act in or on any motor vehicle, on any road, in or on any rail vehicle, or on any railway line.
Police	<i>(‘shall’ and ‘must’ mandatory)</i>	Provisions of the Act in or on any motor vehicle, on any road, in or on any rail vehicle, or on any railway line. Provisions of the Act related to retail sale of fireworks (restrictions and prohibitions imposed under the Act).
Civil Aviation Authority	<i>(‘shall’ mandatory)</i>	Provisions of the Act in or on any aircraft. Provisions of the Act related to discharge of hazardous substances from any aircraft.
Maritime New Zealand	<i>(‘shall’ mandatory)</i>	All provisions in or on any ship.
Ministry of Health	<i>(‘shall’ mandatory)</i>	All provisions where necessary to protect public health.

Agency		Enforcement responsibility in s 97
Territorial Authorities	<i>(‘shall’ mandatory)</i>	Provisions of the Act on premises in territory other than premises specified above (that is, specified in s 97(1)(a) to (g)).
	<i>(‘shall’ mandatory)</i>	Provisions of the Act on premises where another agency has transferred authority to TA.
	<i>(‘may’ discretionary)</i>	Provisions of the Act on premises where TA is in or on the premises for the purpose of enforcing the RMA provisions.
Regional Councils	<i>(‘may’ discretionary)</i>	Provisions of the Act on premises in region where RC is in or on the premises for the purpose of enforcing RMA provisions.
		Provisions of the Act in or on premises in region where another agency has transferred authority to RC.
EPA	<i>(‘must’ mandatory)</i>	Provisions of the Act relating to classification and content control, and equivalent conditions in group standards issued under s 96B that relate to hazardous substances.
		Requirement to have an approval prior to import or manufacture.
		Prohibitions related to persistent organic pollutants and prohibited hazardous substances.
		Requirements imposed under EPA notices.
		Provisions of the Act related to any regulations, EPA controls, and equivalent conditions in group standards issued under s 96B that relate to hazardous substances in workplaces, to the extent responsibility for enforcement is not expressly covered by another agency.

The hazardous substances enforcement regime was established under Part 7 of the Act. The regime involves a complex sharing of responsibilities and powers among agencies, primarily determined by the location at which the enforcement action is taken. In addition to the agencies listed in s 97 of the Act, New Zealand Customs (Customs) has a role, as does Fire and Emergency NZ (FENZ). The latter’s role is an important one, especially in responding to incidents.

It should also be noted both MfE and MBIE have system roles under the Act – particularly in system monitoring and responses relating to policy development for legislation and regulation. They also have operational options, given the range of powers confirmed by various statutes. Section 98A of HSNO outlines the CEO of MfE (the department responsible for administering the Act) has the functions, powers, duties and protections of an enforcement officer. We make no comments about the Ministry’s role, administratively or operationally. The Technical Working Group’s rationale for this approach is, given that both MfE and MBIE are central policy agencies, we did not consider their role to be central to the scope of the review work.

Attributes of a Fit-for-Purpose CME System

What is the purpose of the system?

The current purpose statement of HSNO provides a focus on protecting the environment and the health and safety of people and communities. The Technical Working Group notes the absence of any reference to the economic and other benefits that may be derived from the use of hazardous substances in the purpose statement of the Act.

The HSWA's purpose is to provide for a balanced framework for securing the health and safety of workers and workplaces. We note the purpose of HSNO contrasts with and lacks the balance that the purposes of both the RMA and HSWA provide. The RMA talks about promoting sustainable management of natural and physical resources (meaning use, development and protection in a way or at a rate) that enables people and communities to provide for their well-being and health and safety.

This does not mean benefits are not relevant to decision making under HSNO. Persons exercising functions, powers, and duties under the s 5 and 6 of HSNO are required to recognise and provide for the following: *“the maintenance and enhancement of the capacity of people and communities to provide for their own economic, social, and cultural well-being and for the reasonably foreseeable needs of future generations”* and to take into account (among other things) *“the economic and related benefits and costs of using a particular hazardous substance or new organism.”* However, it does leave the purpose statement in the Act firmly focused on the environment and people.

We looked at the EPA's and WorkSafe's strategy and policy documents to see if they broadened the scope of these Acts' purposes.

The EPA describes its activities as being to protect people and the environment (for a better way of life). That is also the EPA's mission. Its strategy is to deliver robust, objective decisions and to

ensure compliance with rules and, in relation to our terms of reference, to improve the efficiency of the regulatory framework for hazardous substances. The EPA's documents deal mostly with their compliance approach and machinery matters (tools, escalation, proportionality and so on), rather than expand on the purpose of HSNO.

The Minister for the Environment and the Associate Minister have asked the EPA to produce a new Statement of Intent for 2019 to 2023. The EPA's new vision is *for an environment protected, enhancing our way of life and the economy*. The four supporting strategic goals, their pillars, and the strategic intentions don't overtly broaden the purpose of HSNO. They do however deal with style issues – trust, confidence, right decisions, cost effectiveness, capability and engagement.

WorkSafe's vision is everyone who goes to work comes home healthy and safe. Their Statement of Intent notes improving well-being and quality of life requires a collective approach and its work is closely aligned to key government strategies that seek to improve the health, safety and well-being of all New Zealanders.

Hazardous substances management is not overtly referred to in WorkSafe's strategic documents but is comprehensively covered in supporting website documents. None of them elucidate a broader purpose for the hazardous substances CME system that we can see. Rather, WorkSafe's rationale for hazardous substances management is strongly focused on dangers and on preventing harm. Benefits to the economy are acknowledged but the economy is only one of four well-beings.

Our view is that a fit-for-purpose hazardous substances compliance system needs to capture the full range of intentions of the various Acts. That is because hazardous substances (in lay terms: chemicals) are enormously useful in modern life. They can materially reduce pests and control diseases, boost production of almost all consumer goods and many foods, improve our health and life expectancy, and contribute

to higher living standards as well as better environmental outcomes, among other things.

In our opinion the purpose of the system should be to provide for the benefits to be derived from using hazardous substances, as approved, while protecting the environment and the health and safety of people and communities by preventing and managing their adverse effects.

That means the CME system should enable chemical substances with hazardous attributes to be used for the benefit of:

- people and the community
- the environment
- the economy, and
- nature,

while managing, preventing or mitigating the adverse effects of their:

- manufacture
- misuse
- inappropriate handling, storage and disposal, and
- waste comprised of, or containing, them.

Attributes of a fit-for-purpose CME system

Here are the attributes of fit-for-purpose CME system for hazardous substances; one that is capable of performing to international best practice. We make the strong point at the outset that optimal CME system performance requires the law and the regulations, at the highest level, to create the duties and incentivise the desired behaviours among the regulators and other actors in the CME system.

Role clarity

Role clarity is fundamental to regulator accountability and focus. The law should be clear about duties, roles and responsibilities so its purposes can be achieved. Those duties, roles and responsibilities should be supported in law by powers, including coercive powers where necessary, to ensure performance of the CME system.

Overlapping duties can be as problematic as gaps. We are attracted to the specific way the RMA sets out councils' CME responsibilities for example. The clarity of this approach contrasts with the 'if not us then them' approach in HSNO, which has proven problematic in incident response especially.

Leadership

Effective leadership is an essential element in CME system performance. It is necessary to ensure the overall purposes of the law are achieved, to set strategic direction, to build capability and capacity across the system, to cooperate and collaborate, to shape regulatory culture (where the pendulum swings), to step in and to step up, as well as to monitor system performance through quality information.

System leadership should be a statutory duty with aligned accountabilities and powers. Effective leadership would ensure decision-making policies and practices align with statutory functions; the right information is gathered and shared; scarce resources are allocated strategically; and capability, capacity and relationships are built.

In a distributed responsibility model of CME delivery, the risks are agencies will set their own priorities, primary missions will be misaligned, there will be uncertainty and confusion about who can or will act, and information management systems will not be compatible, among other things.

Information and system management

Quality information and systems to manage that information are important for regulators, the regulated and the wider community. People and organisations need to understand their regulatory obligations and how to navigate their licensing, disclosure and record keeping requirements and the like. Communities also need information to judge whether their interests are being protected and to enable them to have confidence in the regulator.

For the regulators, having a good understanding about what is happening in the any sector is essential to effective planning, assessing risk, assigning scarce resources, prioritising action, monitoring overall system performance and to adapting systems to meet changing needs (as opposed to set and forget). Progress reviews, performance evaluation, and a cycle of continuous improvement are regular features of CME system best practice.

We are concerned there is no comprehensive 'track and trace', volume and place arrangement within the hazardous substances CME system (outside of major hazard facilities). A fit for purpose CME system that has multiple agencies involved with place-based jurisdictions should have comprehensive 'track and trace' arrangements within its framework. Track and trace would provide for an understanding of where hazardous substances are and identify the volumes of hazardous substances around New Zealand.

A fit for purpose CME system should also incentivise evidence-based decision-making. We are satisfied this is the case regarding decisions about hazardous substances approvals and individual compliance actions (including enforcement action). At a system level there are gaps in the approach and improvements that can and should be made especially relating to information sharing. For example, the EPA needs the authority to require information to be provided to enable its duty to gather and report for both decision making purposes and compliance.

Influence and trust

It is important that public and sector confidence in the regulator and the HSNO system is high. Trust and confidence in the system is part of the social licence to operate. Maintaining trust can be challenging. There have been some notable system failures. There are also many alternative versions of the truth on social media. Both of those factors have eroded trust and confidence in regulators generally.

Undue influence must also be avoided. There is a paucity of evidence about undue executive and political influence in regulatory decision-making especially at an operational level. We heard anecdotally that it occurs, but we consider it to be less of a feature of system performance than some may speculate about.

Most regulators across the system have adopted a set of principles and supporting practice guides to try and ensure decisions about CME matters are made transparently, by well trained and resourced staff, using consistent processes that rely on evidence. Best practice is these decisions will be delegated below governance level and often below executive level. Being collaborative in approach, ethical in conduct, lawful in action, responsive and outcome focused are among the other principles we have seen espoused.

Suite of appropriate tools

One of the key principles most regulators apply in their CME work concerns proportionality, sometimes colloquially referred to as the punishment fitting the crime. But there is more to compliance systems than punishment. Best regulatory practice recognises a spectrum approach in which the action taken is the most effective way of achieving the desired outcomes. The spectrum extends from recognition and reward for compliant behaviour; through enable, engage and educate; to enforcement action for non-compliant behaviour with serious consequences. Decision-making factors such as consistency, efficiency, transparency, legality, independence and public interest are relevant of course.

Good regulators are aware of and use a suite of non-statutory tools (written and verbal advice, directions and warnings, further inspections) to achieve their outcomes. The law should provide a full range of statutory tools to enable regulators to meet their CME objectives and to apply the proportionality principle especially.

Statutory tools are typically described as directive (abatement notice, notice of direction, enforcement) or punitive (infringement notice, prosecution). Ideally all regulatory agencies in a sector should have access to the same suite of tools. In the case of hazardous substances CME, where many agencies can be involved in serious non-compliance issues and jurisdictional questions arise, it makes sense for the power to use all of the tools to be transferable or delegable.

Fair arrangements for costs and where they fall

Costs and where they fall can be a barrier to regulatory action. A fit for purpose CME system must not incentivise action or inaction on account of where costs may lie. The resourcing decisions organisations and their governors make are relevant here. So are the provisions in the law relating to monitoring, investigation and enforcement costs; financial assurance measures and legacy issue costs.

We would expect the CME resourcing decisions made by managers, board members and politicians to be aligned with an organisation's compliance strategy and targeted at its priorities. As a minimum, resourcing should support strategy development, training, education and engagement, incident response, enforcement action and public reporting.

There are some particular difficulties involved in recovering the costs associated with hazardous wastes and waste hazardous substances that require statutory consideration. In several overseas jurisdictions it is common for manufacturers, users, or processors of these hazardous substances to have to provide some form of financial assurance instrument as a condition of being able to operate their business. These measures are undeveloped in New Zealand with the result that response and clean-up costs fall on central government and, at times, the community.

There will be instances where that is appropriate, such as a genuine orphan site, or in the case of a once-approved for use but now banned substance. In those cases, the state will need to intervene and carry the cost. They should be the exception.

Findings

In this section, we present our findings on various aspects of the system we have reviewed, and – noting scope and other restrictions – develop a list of key issues our solutions and recommendations are designed to address. We lay out the review findings under a series of headings grouped for readability. We provide a brief summary of our analysis of the international context for hazardous substances compliance; and, finally, we address financial assurance mechanisms. Using the existing literature and prior reviews of the HSNO compliance regime summarised in the previous section, together with our own enquiries, we have been able to articulate a range of findings that have informed our recommendations.

Regulatory context and analysis

Public acceptance of the regulatory system

The effectiveness of any regulatory system is enhanced if the community sees it as necessary, balanced and flexible. There is no formal assessment of public perceptions of the hazardous substances regime. Lobby groups are vocal and active about particular substances (1080, fluoride, immunisation and so on). While there is formal support for regulatory controls from the scientific community, and from official agencies (Parliamentary Commissioner for the Environment), we suspect public attention is of a second order compared to higher profile contemporary issues (climate change, clean rivers).

Compliance with standards of good regulatory practice

There is a body of literature that argues compliance, monitoring and enforcement of regulations is likely to be more effective if the regulatory structure follows standard ‘good practice’ models. The hazardous substances regime appears to have been customised to fit a perceived and specific problem and has

not been refined to fit within the parameters of an effective regulatory model. The result is that enforcement is piecemeal.

Evidential base of regulation

Public and user confidence is greater if there is a strong evidential basis behind classification of substances and the imposition of conditions on their use. We found the scientific grounding of approvals to be strong.

Moreover, there is a formal programme to upgrade alignment with internationally accepted assessment of hazardous substances. When the evidence warrants a review of the status of a substance, that can and does happen, but the regulatory review process is slow and cumbersome. The trusted regulator concept (under which a type of selected mutual recognition of standards will apply) should speed up the process of modernisation and international alignment of standards.

Affirmation of integrity of approvals regime

Confidence is reinforced if there is a public communications process that affirms the integrity of decisions made and rebuts unfounded allegations against them.

Attempts are made to do this, but with limited success. Entrenched positions do not seem to alter in response to evidential rebuttals. It may be that social networks and the internet provide an inexhaustible supply of contestable authority.

Engagement of industry and trade organisations

The regulatory system works best if it is collegial, and if industry and trade organisations engage actively to encourage their members to comply with their obligations so they can continue to reap the benefits hazardous substances offer. Based on the meetings with industry organisations

(as per Appendix 2) we found the extent of industry engagement in promoting compliance is mixed.

Activity is strongest where commercial incentives reinforce regulatory controls because of the risk of lack of market access if residues exceed permitted levels (for example, horticulture). Larger producers and users have the capacity to deploy specialist expertise. For many smaller users, hazardous substances are an ancillary feature of the main purpose of the business, so industry and trade organisations struggle to capture the attention of the target audience. Some agencies lack an effective representational presence, so there are capacity constraints in parts of the system.

Transparency and consistency in the exercise of powers

Consistent application of rules, and transparency in how powers are used increases trust among those who are subject to regulatory authority.

Very different viewpoints exist on this. Some regulated businesses report the interpretation of the rules has been changed retrospectively, creating additional cost and uncertainty. WorkSafe feels any instances are probably deliberate and overdue; the system had become loose and needed to be tightened. There are review and appeal systems in place for contesting the exercise of regulatory authority but at this stage we have not done an evaluation of how they operate – whether they are formulaic and rigid, or whether they create opportunities for human scale interaction. Capacity, and as a result consistency of use of powers, is extremely uneven across different local government jurisdictions.

Enforcement powers

In an effective CME regime, each agency has a suite of suitable tools and a full range of escalating powers, and the range is used appropriately so regulated parties are not incentivised to game the system and to accept the risk of detection because probabilities and penalties justify it. WorkSafe has a full range of powers. The EPA has limited, and largely untested, powers to intervene.

Local authorities have some capacity to enforce regulations but tend to default to RMA rather than HSNO mechanisms. This provides a valuable backstop for the CME regime. Prosecutions for environmental breaches and damages are seen to be extremely costly and time consuming and are in effect seen as being of limited value, and are seen by some as being only of use in extreme circumstances.

Consistent application of powers

There is no systematic information available about communications on enforcement activity. The impression is regulations are applied on a case by case basis (policing, rather than educating about best practice). Implementation of policy and sharing of information is critical to good CME.

Reclassification of hazardous substances

From time to time, previously-approved substances are prohibited, and sites that have activity associated with these substances are deemed contaminated. This is a special sub-set of legacy sites. Operators who were carrying out perfectly legitimate practices can be left with clean-up costs through no fault of their own. These circumstances arise because of past and current decisions of the state, and we can see no policy justification for any party other than the Government having to meet costs of remediation (even if, in the extreme case, the only cost effective solution may be to buy and red zone the site).

Inadequate compliance mechanisms

HSNO provides limited emergency authorities for enforcement agencies to respond to emergency scenarios that pose acute risks to human health, safety or the environment. In defined emergencies, s 136 of HSNO permits an enforcement officer to take fairly broad action for a maximum of 96 hours to secure the property (including restricting access), stop the dangerous activity, and stabilise the emergency. Should emergency conditions remain after that time, emergency powers can only be exercised under another legislative authority – for example, the Fire and Emergency New Zealand Act 2017 or the RMA. This is a current concern.

HSNO does not provide authority or mechanisms for an agency to take action to avoid, remedy, or mitigate adverse effects on the environment or to people even when the party responsible for contamination cannot or will not take such action. If hazardous substances contamination (or threat of contamination) has been caused by a party that cannot be identified, cannot perform the necessary actions, or simply fails to comply with a compliance order, under HSNO, the enforcement agency is limited to bringing a prosecution against the party and seeking an order for such action as part of the sentence under s 114(5) – a necessarily lengthy process.

HSNO has limited cost recovery mechanisms in the event an enforcement agency is forced to take action to ensure compliance or address risks – under the existing regime, enforcement agencies

(and by extension the public) can often end up bearing the costs of addressing or mitigating adverse environmental and human health effects of HSNO non-compliance. In addition to creating a disincentive for action, this is inconsistent with the widely-accepted international environmental law principle of 'polluter pays' – which is encapsulated in Principle 16 of the Rio Declaration on Environment and Development of 1992.

Monitoring, data and information

Monitoring of importation of chemicals

Most chemicals used in New Zealand are imported. Effective monitoring of imports would provide a sound base for quantitative assessments of the front end stage of the product life-cycle.

There is some monitoring by Customs of banned substances. There is a potential improvement of monitoring if rules on direct internet sales are tightened for purposes of collecting GST ("Amazon tax"). Industry organisations try to maintain an overview, but in general this is a largely under supervised aspect of the trade in chemicals. The scale of the problem is unknown, but the suspicion is that it is growing.

Documentation of importation and manufacture

Monitoring would be enhanced if imports were registered in a centralised and accessible database. There is zero compliance with this. Customs coding of imports is aligned with trade classifications which do not cross-reference with EPA approvals categories. There is no database that records volumes of chemicals imported or manufactured in line with categories of substances that have been approved.

Data on storage and use

A CME regime depends not only on documenting when hazardous substances start their life in New Zealand, but where they go, where they are stored, when they are used, and how residues are disposed of.

We found a decentralised and partial documentation and inconsistent regulatory treatment. There is only limited HSNO compliance obligation to maintain an inventory of hazards on any site, but there is an HSWA obligation. There is no obligation to record inventories on a central database. Surveys derived from EPA show low levels of recorded inventory (22 percent)

(Research NZ, 2015). WorkSafe reports increased surveillance of inventory compliance, but no comprehensive record of results. There is some regulatory requirement to report movements of hazardous substances from one site to another (trace) but this is not comprehensive.

Cost effective monitoring regime

Any documentation/'track and trace'/inventory system needs to be cost effective if it is to be fit for purpose. We found issues with the requirement to maintain Emergency Response Plans if certain volumes and combinations of substances are on the premises. This (indirectly) tends to avoid over cluttering any database with information on small volume/low risk combination of hazardous substances.

Information derived from EPA shows levels of compliance to be moderate (35 percent) (Research NZ, 2015), but WorkSafe may be increasing surveillance. There is no requirement to lodge any Emergency Response Plans on a central database (even with FENZ) which calls into question whether it is fit for purpose in an emergency.

There is currently a HSWA requirement to maintain inventory of what is held in the workplace and a HSNO requirement to keep a record of assignment for substances covered under Group Standards. There appears to be a trade-off between higher levels of compliance with obligations to keep up to date inventories, and avoiding trivial record keeping. We are not convinced a recognition of the need for such a trade-off is built into the operational practices of the main regulatory agencies.

Track and trace

In a full product life cycle regulatory system an effective CME system knows where the product is at each stage of that life cycle. There are limited obligations to trace hazardous substances because the approvals regime applies to the substance, not to volume or place. There is some voluntary tracing through sector organisations (such as horticulture and veterinary medicines), some monitoring through RMA consents checking, some discovery after investigation of complaints, and some WorkSafe visit checks. 'Track and trace' is not completely random but is a combination of voluntary self-regulation and random (or possibly targeted) sporadic inspection. The Parliamentary Commissioner for the Environment echoes our concerns and has noted in his independent advice to the Ministers the need to further explore the development of a Pollutant Release and Transfer Register.

Public awareness and prioritisation

Protection extends to residences

There is a tendency to see compliance as involving commercial/industrial users of hazardous substances, but the risk to human health reaches to domestic residences.

Based on our engagement with EPA Safer Homes Programme staff, public awareness is uneven to low. There are about 8,000 hazardous substances-related calls to the National Poisons Centre's hotline and 120 hospital admissions each year. It is subjective if this is high, low, or about what to expect. Regardless, there is no national network engaging the community on educational materials, and no systematic advertising programme drawing attention to the risks. It is a moot point whether any such campaign would attract priority for funding over other causes.

Understanding of risk

In a collaborative and collegial regulatory system, users of hazardous substances have a clear understanding of the risk attributes of different products and a user-friendly way of finding out about them.

There is a reasonably high level of coverage of safety data sheets (TCC NZ Ltd, 2013) in workplaces, and good compliance with protective equipment requirements. There are high levels of understanding among major hazard facilities. The hazardous substances calculator appears to have been made more user friendly, but we only have the designer's word for this (not cross-checked with users). No real information exists about awareness among those who only use hazardous substances as ancillary inputs into their business processes.

Multiple agencies

Diffusion of enforcement responsibilities

The presence of multiple agencies with potential authority to act can create uncertainty and confusion about who has the authority to act in any situation. This can result in either a delay in action while enforcement agencies attempt to determine who has the proper authority to act; or in a complete failure to act, or enforce, where multiple agencies believe the enforcement responsibility lies with, or has been undertaken, by another agency.

In addition, a number of the enforcement agencies empowered by HSNO are not well-placed to prioritise enforcement of HSNO. First, the primary mission of most of these agencies does not necessarily overlap with many of the issues presented by HSNO. For example, WorkSafe's primary mission is to protect the health and safety of workers – its expertise or regulatory focus does not lie in environmental contamination.

The inadequacies of the compliance mechanisms noted above also serve to exacerbate the problems caused by the diffusion of enforcement responsibility. HSNO enforcement agencies may be reluctant to act to address hazardous substances contamination where it is unlikely costs incurred by the agencies will be recovered or offset by other available funding.

The combination of diffuse authority with the lack of expertise, mission, or incentives to prioritise enforcement creates a scenario where agencies could prefer not to act to enforce HSNO and instead rely on the justification that it is another agency's responsibility.

Clarity over regulator roles, responsibility and boundaries

In a layered multi-regulator structure such as the hazardous substances regime, effectiveness depends on role clarity, and good communication.

Different regulators tend to stick to their knitting, with relatively formal engagement, as opposed to continuous. The exception is when an emergency arises, where leadership seems to be assumed by the most appropriate agency. A fit for purpose system should not have to rely on goodwill and common sense in determining what the lead agency should be in responding to incidents. Based on feedback, the previous Health and Safety Technical Liaison Committees provided an effective forum for information sharing and coordination and are being resurrected in some regions.

Training

Training and accreditation

People within agencies that have statutory responsibility for different aspects of enforcement (certification of premises, handling of substances, inspection, imposition of penalties) ought to be properly trained, accredited and subject to continuous professional development obligations.

Concerns were raised by some about the infrequent opportunity to gain practical experience. Questions were also raised about the consistency of training by third-party service providers. Consistency is particularly important where functions like inspection and certification are delegated to third party operators.

Anecdotal reports raise questions about the integrity of some certification processes, but these may be largely historical. There is much greater confidence among regulators that training and accreditation systems are fit for purpose, but this has to be taken at face value. There is no independent evaluation of these systems available.

Hazardous substances disposal and waste

Hazardous waste

The treatment of hazardous waste is the least developed aspect of the regulation of hazardous substances. Almost by definition, waste is not an 'approved' substance, and so it is defined by the characteristics of each substance, but these are difficult to identify in smaller operations, where the by-product of a business process is of remote concern to the entity. This is likely to become more important in the future as the 'easy option' of exporting waste to other countries for disposal becomes more restricted.

Regulation of collection, transport, storage and disposal of hazardous waste

MfE provided us with advice that concludes "*hazardous waste is managed across a fragmented legal landscape, with no single agency being responsible for regulation and enforcement*". Eco-toxic waste poses particular difficulties because it is typically developed in workplaces, but because it threatens to harm the environment rather than workers, it is not top of mind for WorkSafe.

The management of hazardous waste by local authorities is hampered by a lack of capacity and of dedicated revenue streams to apply to it.

Effectiveness of hazardous waste disposal

There appears to be a combination of factors that reduce the effectiveness of hazardous waste disposal: inadequate facilities; cost; ease of access; knowledge of what to do; and weak oversight and enforcement. In combination, these factors are likely to amplify the likelihood of catastrophic events occurring.

Financial responsibility for disposal of hazardous waste

Enforcement is weak, and largely sits outside the formal HSNO regulatory framework. (It tends to be associated with breach of RMA consent conditions.) There is no front end 'bonding' or financial assurance requirement for using hazardous substances that can be accessed for remediation. Offenders can (and do) avoid responsibility for clean-up through bankruptcy.

Legacy and stranded sites

Legacy problems abound, particularly with sites used for timber treatment and for animal health processes (stock dips and so on). More recently, eco-toxic residues from the use of Per and Poly-fluoroalkyl Substances (PFAS) and Perfluorooctyl Sulfonate (PFOS) used in fire-fighting foams have created major financial burdens for small local authorities. Dedicated central government financial allocations are manifestly inadequate to deal with the potential task at hand.

There is no statutory wash-up provision covering retrospective changes to what were previously legitimate activities.

Cost sharing of hazardous waste disposal and/or clean-up

There are risks associated with the use of any approved substance, and it may be some cost sharing (akin to an industry insurance type mechanism) could be seen as part of social licence to operate. There is no hard and fast boundary between accidental environmental damage and irresponsible behaviour. This would establish a three-tier cost allocation mechanism: site specific (with costs to be met by the operator); regional clean-up (possibly funded by resource consent fee and national (with costs met out of a national fund established by a levy to fund broad-spectrum remediation). A major weakness with this funding option is that the consenting regime approves the substance, not the volumes used, whereas a levy would need to be made on the volumes purchased.

Agency analysis

In an earlier section we listed the roles of regulatory agencies under s 97 of HSNO. We have noted the system for managing hazardous substances also extends to roles under other pieces of legislation. In this section we briefly canvas the duties of all the key agencies and comment on their approach as it applies to the hazardous substances CME system.

WorkSafe

WorkSafe has been the primary CME agency for hazardous substances in the workplace since it was created in December 2013. Its predecessor, the Department of Labour, had that role since the time HSNO for hazardous substances came into force in 2001.

In December 2017, the vast majority of controls for regulating hazardous substances moved from HSNO to HSWA. As at December 2017, WorkSafe continued its obligations in the workplace for disposal and ecotoxic controls still set under HSNO. More specifically, the role of certifying premises was delegated from the EPA to WorkSafe in November 2014 but still carried out under HSNO until the commencement of the HSWA reform in December 2017.

The reforms have applied for less than 18 months so it is difficult to know how effective they will be in the future. WorkSafe is building capacity, refining its operating routines and establishing its credibility with the users of hazardous substances.

There are three parts to WorkSafe's regulatory role in the hazardous substances CME regime: certifying premises as suitable for the use of the hazardous substances involved in the processes carried out on site; monitoring and enforcement of the regulations that apply to the relevant substances; and responses to incidents reported.

The certification process is carried out by third party compliance certifiers, who are engaged directly by businesses that are seeking certification. We believe this carries risks (of both over and under performance relative to regulatory requirements).

A concern expressed to us is the certification process seems to be tightening up with retrospective effect. Established businesses may lose their licence to operate without them doing anything different. WorkSafe accepts this may be happening, arguing certification may have become too loose.

There is nothing inherently wrong in standards being tightened: upgrades to the building code requiring owners to strengthen existing premises is a comparable example. Good practice would provide a period of grace during which upgrades would take place, and an appeals and review process would allow interactions between regulator and the regulated to explore different pathways towards compliance. We have no conclusive evidence about how user-friendly and collegial the recertification process has become but feel confidence in the integrity of this aspect of the system would be enhanced with more transparency and more open communication.

Monitoring is resource intensive. Our rough rule-of-thumb estimate is if every business premises was to be randomly visited with the current volume of WorkSafe inspections, it would be visited once every twenty-five years. That regime would effectively be voluntary self-compliance: the risks of detection of a breach of approval conditions would make detection and penalty ineffective from a cost/benefit point of view. Sites that require a location compliance certificate are checked on a more regular basis by independent compliance certifiers.

WorkSafe has instead opted for a risk-based inspection regime delivered through its Enforcement Decision-Making Model. At the highest level of risk, sites designated as Major Hazard Facilities are visited at least once every two years. Other sites are identified using sector/ risk identifiers. At this stage we are not able to make an assessment of whether the lower risk sites are falling through the cracks, and whether non-compliance with controls poses a systemic problem.

One check on this was the compliance surveys carried out by the EPA until 2015. These have not been carried out since then, because WorkSafe has taken over regulatory responsibility for compliance and does not regard the surveys as reliable. WorkSafe considers its inspection activity provides more objective data than the previous compliance surveys.

We had anecdotal opinion the old Labour Inspectorate focused more on safety (physical harm) than on health, and this carried over to the culture WorkSafe inherited. WorkSafe insists the two dimensions to its remit are respected in designing its inspection/enforcement programmes moving forward.

WorkSafe is primary concerned with the health and safety of people, and the impression we gained is its responsibilities for regulating eco-toxins and the disposal of hazardous waste beyond the premises are unwelcome burdens. WorkSafe says it is embedding these responsibilities into business as usual.

Environmental Protection Authority

The EPA is given the overall responsibility of ensuring *"the provisions of [HSNO] are enforced in all premises likely to contain a hazardous substance"* which includes premises under the enforcement responsibility of other agencies. As above, this was a change introduced by the Select Committee considering the Bill (Report of the Committee, 1995). The Committee noted *"[EPA] will have the job of monitoring and overseeing the total enforcement system to ensure that an effective*

level is occurring” (Report of the Committee, 1995). It has carried out its obligation under s 99(1) of HSNO by way of seeking annual reports on activities and intentions of hazardous substances enforcement agencies. As the EPA stated in a self-initiated review of all of its functions:⁹

“The EPA’s letter to the Minister outlined that it had on numerous occasions written outlining problems with enforcement agencies and that this had not impacted on enforcement performance. Figure 3 from the New Zealand Productivity Commission’s recently released report on Regulatory Institutions and Practices Report is helpful in that it provides a model whereby if an action is unsuccessful and does not achieve the desired outcome that the issue should be re-evaluated, and new intervention strategies developed. The EPA should examine how its current interpretation of its role and possible interventions addresses the system issues identified earlier. This could include the EPA considering whether to take a wide or narrow interpretation of supervisor in the HSNO legislation. At a systems level the EPA needs to reach agreement with MfE and the enforcement agencies on how it fulfils any supervisor role.

This theme of system leadership also aligns with the Minister’s Letter of Expectations... EPA to consider how effectively hazardous substances education, compliance and enforcement is being carried out by others and what role EPA might play to improve these in order to reduce harm (para 9).

Whatever the EPA decides on its role as strategic leader in HSNO compliance the decision will have to be consistent with its mission and stated objective of raising its profile. This must also be agreed with HSNO enforcement agencies and the sector. Creating a new Strategic Intention on strengthening the EPA’s compliance responsibilities would ensure a sharper focus and higher priority for the area.”

We note these intentions were stated prior to the 2017 HSWA and HSNO amendments.

However, HSNO gives the EPA limited tools to execute that responsibility and combat the risks of regulatory failure inherent in HSNO’s enforcement regime.

- In the event the EPA determines an HSNO enforcement agency is conducting insufficient enforcement or inspections, the EPA has no authority to compel or direct action by the agency to address the issue. Rather, the EPA is limited to notifying the agency and MfE of its determination.

- Although s 99 of HSNO permits the EPA to appoint an enforcement officer to exercise enforcement authority on any premises ‘as it sees fit’ – including those under the scope of another agency - and thereby take action itself, this is a limited and reactive function given the primary responsibility given to other authorities (save for certain enforcement responsibilities given to the EPA directly).¹⁰
- The EPA is not even given the tools to require HSNO enforcement agencies to provide enforcement information beyond that required by s 98(2) – that is, appointed enforcement officers, the premises those officers are warranted for, and the nature and level of inspection and enforcement to be provided by those officers.

Unfortunately, HSNO does not create a duty of system leadership nor does it enable the EPA to manage the risks inherent in the HSNO CME regime. Those risks arise as a result of having multiple agencies with the potential to act (or not) depending on substance and place, their capability and capacity, as well as the priority that they place on action as a result of their primary mission. Their appetite to incur unrecoverable costs is a further influence on action.

That said we are satisfied with the EPA’s approach to and performance in hazardous substances classification and content control, the requirements in relation to import and manufacture approvals, and its management of persistent organic pollutants and prohibited hazardous substances.

We have noted elsewhere in this report some of the challenges the regulatory framework in HSNO presents for the EPA in its ‘supervision and coordination’ of enforcement roles. Those challenges relate to its lack of coercive powers to obtain information, to the distributed nature and placed-based regulatory powers of the regulators, the suite of regulatory tools, and so on.

That said, HSNO does contain provisions that appear to give the EPA the ability to refine and craft the regulatory system for the approval, use, transport and disposal of hazardous substances to a greater extent than is occurring. We are referring to the powers in s 76 and 76A of HSNO in particular the powers to prescribe controls and requirements on hazardous substances and to prescribe other matters relating to hazardous substances.

⁹ Refer Self-review of the Environmental Protection Authority (EPA) 5 September 2014 at <https://www.mfe.govt.nz/sites/default/files/media/About/self-review-of-the-epa.pdf>.

¹⁰ The EPA is restrained from stepping into territorial authorities’ shoes however, unless there has been Minister to Minister consultation and a direction given to EPA by the Minister (s 101(1) HSNO).

We haven't been able to ascertain why the EPA has interpreted its role as conservatively as we have been advised. We observe however, if it thought it was justified, the EPA could explore its authority to establish, as part of an approval, a wide range of requirements relating to the creation, storage, handling, transport and disposal of hazardous substances as well as substantial ongoing reporting requirements.

A benefit could be the development of a full risk-based compliance framework with the targeting of compliance effort to best effect.

On the face of it, information is the key to system leadership, and we have identified this could be partly achieved by the EPA's approvals and notices creating specific reporting and information obligations. The EPA could then place itself in the position of being able to notify any of the regulatory agencies listed in s 97 of HSNO of potential non-compliance and of the requirement to take enforcement action.

We consider there is more the EPA can do within the law as it stands to improve its understanding of system performance and to fulfil its s 11 statutory functions and s 99 supervision role. This would include analysing the health and environmental risks of non-compliance in the past year; identifying areas of and trends in non-compliance by industry with HSNO provisions; targeting and prioritising future CME action; and assessing the effective use of compliance and enforcement tools for instance.

The EPA's aim should be to better understand the regulated community and the challenges regulators face as well as identify the hurdles to meeting the purposes of HSNO. The EPA can then escalate these issues in its reporting (to the Minister) as part of its responsibility to ensure the Act's provisions are enforced, and the system is performing.

In the absence of statutory powers, the EPA needs to rely on a memorandum of understanding (MOU) or guidelines to achieve its ends. These must be targeted and purposeful documents rather than the 'roles and relationships' type of documents we have seen.

HSNO provides a further opportunity for the EPA to take a leadership role in enforcement. We are unsure that has been exercised to the extent it could be. The EPA is able to appoint enforcement officers under s 99(3) to exercise hazardous substances enforcement powers on premises under the authority of other agencies 'as it sees fit.' The only constraint would appear to be an enforcement officer's

warrant must specify the premises for which an EPA officer may exercise authority. That is a simple administrative matter to address.

We are uncertain whether the EPA's apparent reluctance to step up to the plate is due to a lack of strategic intent or concerns about its power to do so due to its view on the law.

We did inquire about an overarching strategy in relation to the EPA's approach to and development of its CME capability and capacity. There does not appear to be one to guide intervention priorities, investment decisions and service delivery arrangements as opposed to a wider policy framework to its CME activities.

The EPA's position on the law seems to be it does not have a lead enforcement responsibility but rather, a coordination and supervision (of inspection) role and other agency buy-in is required to enable a leadership role to be performed. Those roles involve an implicit duty to gather information about system performance, to assess it and advise the relevant agency and the Minister about the agency's views.

HSNO has a further weakness in that other agencies are not subject to a duty to provide the information requested. This weakness is exacerbated because the EPA's duty is in relation to 'enforcement' when, as we know, there is much more to ensuring HSNO's purpose is met. The EPA has a power to 'step in' but it is limited and is subject to Ministerial approval.

The EPA's duty under HSNO in relation to CME activity (as opposed to substance approvals and condition setting) appears to be best described as an active supervisory one. We consider that to be an unsatisfactory state of affairs. It is not enough to rely on the EPA's ability to find non-statutory work-arounds to try and ensure hazardous substances CME system performance and the Act's purpose. The duty of system leadership needs to be embedded in the law especially given the risks the Act's multiagency, place-based enforcement system presents.

One of the central planks in building and maintaining a robust compliance and enforcement programme is understanding areas of risk, which comes from knowledge of the regulated community. Without that information, it is impossible to build a strategic, intelligence-led compliance programme. Because the EPA does not have the authority to positively require agencies to provide information beyond that specified in s 98(2) (which is mostly quantitative data), it is dependent on the goodwill of those agencies to cooperate to provide further

information – such as the justification for specific inspections or enforcement actions (or lack of such actions), overall enforcement priorities, or other such information.

In 2017 MfE observed the EPA's annual report to MfE focused on quantitative factors, rather than including qualitative analysis of that data. MfE suggested future reports should include a qualitative analysis and that the EPA should gather more substantive information and take a leadership role in enforcement. However, currently, HSNO does not provide a legal framework for the EPA to either set intelligence-led enforcement priorities for HSNO enforcement agencies, or to gather the information required to set those priorities. In addition to the lack of tools given to the EPA to fulfil the overall regulatory responsibility assigned to it in HSNO, the risks of regulatory failure inherent in HSNO's enforcement regime arise from problems with or caused by:

- inadequate compliance mechanisms
- the diffusion of enforcement responsibility among multiple enforcement agencies.

NZ Transport Agency

The New Zealand Transport Agency (NZTA) has a discretionary enforcement role under HSNO "*in or on any motor vehicle, on any road, or on any railway line*". Enforcement in these places is of the controls the EPA has placed on the transport, identification and packaging of hazardous substances and to international conventions and codes.

The transport phase is only one part of a hazardous substance's lifecycle. During this phase a substance is in some form of containment or packaging. Compliance with Land Transport Rules generally ensures HSNO compliance for packaging, marking, labelling, segregation and documentation while being transported.

The Land Transport (Offences and Penalties) Regulations (1999) provide for offences against the Land Transport Rule. There are also offence provisions in HSNO relevant to the transport sector. We did not talk to NZTA or to New Zealand Police (NZ Police) about their roles in the hazardous substances CME system because nothing in the background material pointed to problems there.

We did hear anecdotes about road accidents involving trucks carrying hazardous substances. The issues there related to the appropriateness and timeliness of incident responses. These fell to FENZ and/or a local authority.

Commissioner of Police

The role of NZ Police under HSNO is, after consultation with NZTA, to ensure the provisions of HSNO are enforced "*in or on any motor vehicle, on any road, in or on any rail vehicle or on any railway line*". As we note, Land Transport Rules establish the compliance framework.

NZ Police enforce the relevant Land Transport Rules on NZTA's behalf. We have not inquired about the enforcement statistics but conclude from other feedback that NZ Police are more likely to enforce the Land Transport Rules under the Land Transport (Offences and Penalties) Regulations (1999) than use s 109 of HSNO.

NZ Police are also responsible for enforcing provisions relating to the retail sale of fireworks.

Director of the Civil Aviation Authority

The Civil Aviation Authority is responsible for ensuring the provisions of HSNO are enforced in or on any aircraft as well as in relation to any discharge of a hazardous substance from an aircraft.

International air transport is regulated by the International Civil Aviation Organisation (ICAO). ICAO Technical Instructions are incorporated by reference in New Zealand Civil Aviation Rules for the carriage of dangerous goods. Compliance with the rule also results in compliance with the International Air Transport Association (IATA) Dangerous Goods Regulations.

As with land transport, compliance with IATA and Civil Aviation Rule Part 92 generally ensures compliance with HSNO requirements for packaging, marking, labelling, segregation and documentation of hazardous substances while being transported by air.

The Civil Aviation (Offences) Regulations 1997 provide for offences against Rule non-compliance. There was nothing in our briefing notes or arising from our inquiries that gave us cause to speak to the Civil Aviation Authority about its role or the performance of its part of the system.

Director of Maritime New Zealand

The Director of Maritime New Zealand is to ensure the provisions of HSNO are enforced on any ship. International sea transport is regulated by the International Maritime Organisation's International Maritime Dangerous Goods (IMDG) Code. This Code is incorporated into the Part 24A which regulates the transport of dangerous goods by sea.

As with land transport, compliance with IMDG Code and the New Zealand Maritime Rule, generally ensures compliance with HSNO requirements for packaging, marking, labelling, segregation and documentation of hazardous substances while being transported by ship.

The Maritime (Offences) Regulations 1998 provide for offences against the Maritime Rule. These provisions and offences apply broadly – to ship owners and masters, to harbourmasters, shippers of dangerous goods, manufacturers of packaging, consolidators and packers and to port operators.

Chief Executive of the Ministry of Health

The Ministry of Health's (MOH) duty is to ensure the provisions of HSNO are enforced anywhere it is necessary to do so to protect public health. The Ministry has this duty in its own right and has contracted District Health Boards (DHB) as service providers.

The duty is incapable of precise definition. It could exist nearly everywhere or nowhere assuming one of the other enforcement agencies 'claims' the lead.

Our inquiries led us to conclude that, other than for their role in vertebrate toxic agent approvals, environmental public health professionals don't rely on HSNO provisions for their hazardous substances work. Instead they rely on their Health Act and organisational missions for their mandate. The Ministry could be taken out of HSNO's s 97 list of agencies without any loss of functionality or performance.

It also appears from comments made to us that the other regulatory agencies, at least in some parts of the country, don't recognise the MOH's or DHB's HSNO role. This could be due to factors such as uncertainty about their jurisdiction under HSNO given that hazardous substances are mostly a workplace issue, the loss (or perception of a loss) of local expertise and the lack of local contact and relationships since the demise of Hazardous Substances Technical Liaison Committees.

It should not be inferred from this that the MOH and DHB's role in the helping to achieve the purposes of HSNO is minor – far from it.

Of the around 100 Health Protection Officers nationally about 30 are HSNO warranted; there are National Health Emergency Plan and Hazardous Substances Incidence Guidelines for hospitals; the MOH and DHBs are key sources of public information about arsenic, lead and asbestos as well as child-resistant packaging and poisons around the home. They also have an operational role to support product recall and withdrawal.

We were informed health advice, advocacy, intervention and support work are 'what we do'; the Health Act mandate is sufficient for this work and having a HSNO compliance role adds very little if anything.

Chief Executives of territorial authorities

There are 67 territorial authorities in New Zealand. Fifty-three are district councils, 13 are city councils, and one is unique – the Chatham Islands Council. Five of these councils are unitary councils, which also have the powers of a regional council.

The obligation on their chief executives is to ensure the provisions of HSNO are enforced in or on any premises situated in the district other than those premises assigned to other regulators by s 97 of the Act and other than to protect public health. The chief executives have the discretion to enforce HSNO in or on any premises when the territorial authority is there for the purpose of enforcing the RMA. HSNO also provides for the enforcement function in or on any premises to be transferred to a territorial authority, in which case the duty to enforce is mandatory.

Except for a few larger (generally city) councils we doubt this is appropriate and whether these councils have the incentives and resources to carry out the function effectively. There are two compounding issues.

The first concerns priorities. Set alongside the other demands on resources and ratepayers many councils don't prioritise the resourcing of HSNO compliance work. Many of the same councils struggle to meet their RMA CME obligations, let alone HSNO. The former is probably seen to be significantly more important locally.

The second issue relates to the extent of the HSNO enforcement task locally. We heard from councils there is simply too little action to maintain staff, their training and competency. The Auckland Council's story is illustrative. That Council has around 25 HSNO-warranted officers but estimates only two to three full time equivalent (FTE) staff are occupied on hazardous substances CME work.

Our inquiries revealed councils tend to look to the RMA for enforcement remedies, rather than HSNO, when dealing with incidents. This is most likely because of a focus on consequence rather than cause, familiarity with the law, skill sets, and the attractiveness of the RMA tool kit. That said, we think the shortcomings in some councils' approach to their RMA duties have contributed to some incidents involving hazardous substances not being prevented or at least limited in their extent. It is moot whether these incidents should be viewed solely as HSNO CME system failures.

On balance, considering how enforcement responsibilities should cascade down through the s 97 agencies in a manner aligned with risk, we don't consider territorial authorities' HSNO enforcement role performance is material to overall system performance. It follows any further investment in their resourcing, training and commitment is likely to yield a poor return.

In contrast, we think a step up in their RMA CME capability and capacity would bring broader community and environmental benefits and would also contribute to meeting HSNO's purpose and its compliance system performance.

Auckland Council case study

The Auckland Council's story helps to understand the role territorial authorities have under HSNO. The Auckland Council is a unitary council. Unitary councils are territorial authorities with regional council functions as well. Auckland has around 25 HSNO-warranted officers but estimates only two to three FTE staff are occupied on hazardous substances CME work. Most of that work is reactive, that is to incidents and complaints. While it has HSNO enforcement powers, we were advised the Council's RMA powers are used for preference.

We are confident this low number of staff required to meet its HSNO obligations is not the result of a council that takes its responsibilities lightly – far from it.

We were impressed with its willingness to act in support of threats to people and the environment even when their power to act could be debated.

Rather we consider the level of resourcing (two to three FTEs for about 40 percent of the country's population) illustrates the reality of the territorial authorities' hazardous substances regulatory role under s 97 of HSNO. Put simply, there is little residual risk for the council to manage and work to do, if the other s 97 agencies are meeting their place-based regulatory roles. It follows, in our view, that further investment in the resourcing and training of council staff specifically to perform hazardous substances CME roles, won't produce an effective return.

Chief Executives of regional councils

The New Zealand local government sector has 11 regional councils. As noted earlier, five territorial authorities have regional powers and functions. They are the unitary councils. So, there are 16 councils with regional powers and functions.

The chief executive of a regional council may enforce HSNO provisions on or in any premises when the council is there enforcing the RMA; and may enforce those provisions on premises where the function, power or duty is transferred to them. (Note: in contrast to territorial authorities which must ensure transferred functions and so on are enforced, it is discretionary whether a regional council ensures the provisions are enforced.)

Simply put, regional councils have no mandatory role in relation to HSNO. Yet, perhaps with the exception of some of the larger city councils, they are the local authorities best placed to perform such a role. We saw evidence of that in the reports we were given on two very serious incidents involving hazardous substances and are aware of others.

While their capability and capacity are variable, as a sector they are the best resourced and most able to support meeting the HSNO purpose and its CME system performance. They have a broad environmental stewardship remit under the RMA and have the people, systems, processes, and networks to perform a more significant role. This could extend to providing a regional or local presence for central agencies.

The rationale for this view is our observation that councils, at least in their incident response roles, are motivated to act to mitigate any adverse effect on their people, communities and the environment. They tend to rely on the provisions of the RMA as their mandate and first port of call when it comes to remedies including enforcement, even when a hazardous substance is perturbing the environment.

We feel there is a strong case to engage the regional and unitary councils about an enhanced role for them in the hazardous substances CME system, including central agency extension work. There will be issues. Funding will be a key one. Information and knowledge sharing will be another

as will trust and confidence in relationships, specifying levels of service, agreeing accountabilities and the like. There is scope under the Act for the transfer of functions, duties and powers to specified persons (including regional and territorial authorities) (s 98 of HSNO). The transfer of powers by territorial authorities to regional authorities is an option which has the potential to enable regional and unitary authorities to take a stronger role in the hazardous substances CME.¹¹

Fire and Emergency New Zealand

The role of Fire and Emergency New Zealand under HSNO was reviewed and confirmed as part of the Department of Internal Affairs-led reform of the Fire Service. It was agreed FENZ would retain its lead function of responding to hazardous substances incidents, to stabilise them and render them safe.

In addition to this main function under the Fire and Emergency New Zealand Act 2017, FENZ has additional functions relating to hazardous substances as set out in s 12 of the Act. These include providing assistance at transport accidents, promoting safe handling, labelling, signage, storage and transportation of hazardous substances and “*any other additional function conferred by the Minister under s 112 of the Crown Entities Act.*”

FENZ is also involved in consulting (for major hazard facilities), reviewing and commenting on Emergency Response Plans as well as retaining copies of Plans to assist them respond to incidents. They are also required to be advised of fumigation activities.

FENZ main role in the hazardous substances CME system is in incident response. The additional functions it has under s 12 of its Act suggest there is scope for a broader role in the system. That is especially so given the significant powers FENZ has to support its roles. These powers include appointing investigators, entering buildings, including where “*hazardous substances are present in quantities exceeding the prescribed minimum amounts*” – (s 75(1)(d)).

The reasons buildings can be entered include to gather information for pre-incident planning and to assess compliance with the requirements of any relevant fire safety legislation.

These powers, combined with the power of the EPA to authorise the chief executive of any Crown entity to appoint enforcement

officers under HSNO, suggests to us there is an opportunity here to access a very focused national workforce to contribute actively to compliance with hazardous substances regulations and best practice. It would enable centrally based entities such as the EPA to gain national reach.

Effective harnessing of FENZ resources requires hazardous substances CME system leadership to ensure adequate information sharing, training and funding. System leadership is a matter, which we have commented on extensively in our report.

New Zealand Customs Service

Customs’ main purpose is to stop any dangers, hazards and threats entering New Zealand. Our impression is the systems and processes Customs has in relation to people, weapons, objectionable material, drugs and revenue collection are well developed but not so in regard to hazardous substances. The exception to that is in relation to prohibited substances, those requiring an import permit, and the tracking of some substances such as explosives and sodium fluoroacetate (1080). It is important any effective ‘track and trace’ system has the border as one of its starting points.

International analysis

We have not carried out an extensive survey of what happens in other countries, because it became apparent to us there are very different historical and institutional influences that shape law and practice in different countries, and the whole environmental protection landscape is evolving everywhere. There is no ideal model to copy, and if we could identify what might be regarded as best practice, new ideas and approaches will soon overtake it.

We draw three conclusions from the international comparative work undertaken.

Firstly, the internationally transportable elements of a system relate to the science that assesses the properties of different substances. These are evidence based, and in general do not require country-specific modifications to make the lessons relevant here.

The EPA is intending to modernise its approvals by adopting the United Nations’ GHS system of classification of the hazardous properties of various hazardous substances. It intends to move towards a trusted regulator concept under which any substance approved by a designated set of countries seen as having robust assessment

¹¹ Workplaces are however regulated by WorkSafe in relation to certain aspects of hazardous substances (s 97(1)(a) and (b)). The EPA must enforce certain aspects of the HSNO regime in workplaces, to the extent that responsibility is not otherwise provided for in s 97. Territorial and regional authorities enforce HSNO only in premises that are not regulated by WorkSafe (among other agencies). There may therefore only be a limited CME role for local and regional authorities in relation to hazardous substances, given most places will be workplaces.

procedures can be approved for use here, subject to the conditions applied by the trusted regulator. This allows New Zealand to take advantage of international intellectual property and overcomes some of the time and cost barriers associated with having to evaluate each and every substance.

Our second observation is not only do approvals systems vary tremendously between jurisdictions, but so do terminology and monitoring and enforcement processes.

At the risk of colossal oversimplification, international (industrialised country) systems can be divided between those that ‘cascade down’ and those built from the bottom up.

European Union (EU) countries fall into the cascade down category. The GHS classification is the foundation starting point for the regulatory systems. The EU has then produced a subsidiary Classification, Packaging and Labelling (CLP) Regulation to align those aspects of regulation to the GHS. Individual member states then develop monitoring and enforcement regimes consistent with its historical and institutional traditions.

As an example, Germany has an array of controls on various substances (such as tobacco, as well as hazardous substances) and its BAuA (their equivalent of our WorkSafe) issues guidelines on how to apply its Ordinance to substances covered by the EU CLP Regulation. The UK has its Control of Substances Hazardous to Health (COSHH) Regulations which are in turn enforced by the Health and Safety Executive (HSE).

Canada is an example of a bottom up system. It began with a clean slate categorisation of the roughly 23,000 substances known to exist in Canada. After that, any new substances needed separate assessment. Enforcement was delivered through the Chemicals Management Plan, a joint initiative of Environment Canada and Health Canada.

In Australia, the equivalent of WorkSafe approves dangerous goods, and their EPAs regulate the end of life stage of the substance, with a much heavier emphasis on the risks waste products pose to communities and the environment.

At this stage (remember hazardous substances systems evolve), New Zealand is moving from a bottom up approvals regime to greater alignment with GHS, but with a relatively recent split in enforcement responsibilities.

We see no advantage in trying to copy other systems. They are different, but more by degree than in substance.

Our final observation is by comparison, New Zealand is rigorous at the front end of the approvals process, relatively devolved in the compliance and monitoring stages of when substances are used, but very (comparatively) light handed in the regulation and supervision of the collection, transporting and disposal of hazardous waste.

This may be a factor of geography. In other countries, hazardous waste accumulates near industrial processes and in closer proximity (relatively!) to higher concentrations of people. The risks to health and of fire are higher and the ‘public safety’ dimensions rank alongside the public health aspect of concern.

Our strong conclusion is if there is one additional lesson to be learned from our review of international experiences, it is that we need to pay a lot more attention to the regulation and management of hazardous waste.

The two incidents most influential in commissioning this review did not arise from the misuse of approved substances but from the improper handling of hazardous waste. A case in Northland purported to reprocess chemicals but to all intents and purposes it was a waste storage facility. Concocted effectively involved a business that accumulated others’ electroplating chemicals.

The major incidents (apart from those caused by natural events) creating catastrophic events in Australia in recent years have been associated with hazardous waste, not the use of approved substances. Having said that, we do not in any way want to detract from the pernicious and invasive impacts, both on human health and on the environment, that approved hazardous substances can have and will continue to have.

Financial assurance mechanisms

Cost recovery arrangements for non-compliance (by the recipient) with compliance orders and the like should be an integral part of a fit for purpose regulatory system. In addition, when dealing with hazardous substances and waste, specific provision should exist for the clean-up and recovery of contaminated sites. HSNO is deficient in both of these respects.

Elsewhere in this report we have recommended appropriate cost recovery arrangements when an agency or another party has to step in to meet another’s obligations under (for example) a compliance order. In this section we consider the

mechanisms to protect communities from the cost of cleaning up sites that are (or may become) contaminated with hazardous substances. A situation where the contamination is due to a 'once approved now banned' substance also requires consideration.

New Zealand's environmental management tool box is light on effective cost recovery mechanisms especially those that give assurances that future liabilities can be met by operators and duty holders if something goes wrong.

There is an important principle sitting behind the proposition that communities should not be the 'first call funders' of hazardous waste and contaminated site clean-ups. The principle is, polluters should pay.

More broadly, the principle is that the financial consequences of certain types of harm caused to the environment should be borne by the operator who caused the harm. This embraces polluter pays and environmental liability principles.

If these costs are not borne by the producer or site manager, however those responsible may be defined, the costs will fall on others, that is future land owners, victims, communities and local and central governments.

While there are both carrot and stick approaches, it is common in other jurisdictions to see accountability sheeted home via a strict liability regime for non-compliance combined with some form of financial warranty supported in turn by financial assurance testing. The taxpayer and Government should be the last resort funder except when the cost is a consequence of legacy issues arising from once approved, now banned, substances. We think there is an argument in equity for the Government to substantially meet those costs.

Financial assurance instruments include:

- lender liability mechanisms
- insurance
- warranties and representations via indemnity agreements
- trust funds
- bonds – both payment bonds and performance bonds
- letters of credit
- corporate guarantees
- personal guarantees.

We have noted third-party financial instruments have the effect of acting as private regulators in the system.

In Victoria, the EPA doesn't specify the type of instrument or, for the moment, the amount. It is up to the duty holder to satisfy the regulator they can meet any future liabilities arising from what they are being authorised to do. *Ex ante* proof of the ability to meet the cost of a future liability is key/fundamental to the effectiveness of these instruments.

That requires financial assurance proposals to be supported by a financial assurance test. The test could relate to solvency, liquidity or third-party assurance. In one jurisdiction, property is not permitted to be abandoned in bankruptcy even when its value is less than the cost of cleaning it up.

In the US, EPA regulations set the criteria for the financial assurance test. Other approaches involve having demonstrated financial resources at the outset to fund estimated closure/restoration costs. Measures such as these don't work alone. The Comprehensive Environmental Remediation, Compensation and Liability Act 1980 (CERCLA or Superfund) is an example of a US statute albeit from 40 years ago, creating the framework for these instruments, among other things.

In New Zealand, in the US and Europe, 'clean-up funds' sourced from general revenues, industry levies or a combination, are used as a backstop.

MfE administers the Contaminated Site Remediation Fund (CSRF) to assist local authorities with site clean-ups where there is a risk to human health and the environment. The Fund receives annual funding of \$2.63M which is inadequate given the legacy and future risks the nation faces.

In the US the Central Hazardous Materials Clean-up Fund (Department of Interior) and the Brownfields Grant Fund (EPA) are examples. The former fund has a Liabilities Management Team that pursues cost recovery from 'potentially responsible parties'. They have recovered over US\$500M in the last 20 years. The Brownfields fund provides clean-up, revolving loans, technical assistance, training and research.

States in the US have funds also. The New Hampshire Hazardous Wastes Clean-up Fund for example is drawn from levy payers who are charged on a manifest system supported by mandatory reporting.

The European Commission has promulgated an Environmental Liability Directive. It aims to ensure economic operators meet the cost of certain types of environmental harm they cause. The Directive sets out principles and how financial responsibility will be enforced. Typically, that is through a financial security instrument to cover responsibility for liabilities that accrue.

Green Finance is a relatively new financial approach to integrating environmental protection and economic profits, for example carbon pricing, global green bonds. The other instruments are similar to those used to secure against other business risks and liabilities.

We are recommending the lead agencies investigate and develop appropriate financial assurances mechanisms for use here. It may be a 'track and trace' system needs to be developed in parallel if volumetric or weight-based levies are to form part of the funding mix.

We have dealt with non-financial measures to support regulatory compliance elsewhere. Non-financial measures that could reduce the risk of an environmental liability arising include:

- voluntary product stewardship arrangements
- strategy and environmental reporting obligations
- chemical data and tracing reporting
- corporate social reporting responsibility
- personal and director obligations for environmental performance failure.

Concours Electroplating case study

Concours Electroplating operated near the Timaru central business district (CBD). On 9 February 2015 there was a fire caused when an unattended acid vat heating element failed. The site contained a cocktail of electroplating chemicals the owner had accumulated over time. The site had been on the regulators' radar since around 2013 with 19 written warnings, improvement notices or compliance orders being written.

Despite obvious failings the site operator was issued with an Approved Handlers Certificate after the fire. He was required to have one but did not prior to the fire. The process of Certification was challenged and found to be 'not unreasonable'. It defies

our sense of logic the operator could get an Approved Handlers Certificate 'after the fact' and on the back of 19 written warnings notwithstanding the credentials of his referees. While this incident predates the 2017 HSNO amendments, it illustrates the problems with the scheme of the Act which still prevail. Those problems include the effectiveness of the regulatory tools, confusion over agencies' jurisdictions and roles in incident response and clean-up, as well as the lack of an effective financial assurance mechanism. We also think this illustrates a failure of the regulatory agencies to use the tools they have, to coordinate and respond effectively and in a timely way.

Recommendations

In this section, we have set out our recommendations. The recommendations are primarily made to the Chief Executives of the EPA and MfE, as they jointly commissioned the Technical Working Group's review.

Hazardous substances are managed in a complex, multi-agency framework. A comprehensive upgrade of that system will necessarily require a large number of complementary changes.

The risk is our recommendations take on the appearance of a long list of disconnected proposals. Some touch on more than one problem area we identified. Some problems will only be addressed if more than one initiative is taken.

In reading through the recommendations that follow, we hope the suite of measures will be easier to follow if the reader keeps in mind six themes we address.

These are:

- enhance the authority of the EPA and other relevant agencies to act to prevent and mitigate harm through a combination of statutory and financial initiatives
- strengthen leadership and improve inter-agency coordination
- ensure agencies have a full range of enforcement tools at their disposal
- consolidate CME mechanisms to reduce capacity and competency limitations
- establish a robust, accessible central database of risky volumes and combinations of hazardous substances
- monitor system performance to create a platform for continuous improvement in regulatory and operational practice.

We have grouped the recommendations according to whether they relate to 'regulatory context, policy and practice or regulatory agency operations'. Some recommendations aren't so easily categorised. The recommendations, where relevant, are supported by some

commentary on the issue sought to be addressed, the options we considered, and the rationale for the path we advise.

Regulatory context

There are deficiencies of the HSNO enforcement regime that may lead to regulatory failure. This section identifies possible legislative or regulatory changes that could resolve these issues. It is beyond the scope of this report to present fully developed proposals for those changes.

The most glaring issues include the lack of authority for enforcement agencies to act directly and efficiently in order to abate or mitigate harm or the risk of harm to the environment or human health (particularly in emergency situations); the lack of any funding or cost recovery mechanism available to enforcement agencies that do act; and the lack of clear authority for the EPA to act directly to enforce HSNO or to direct, coordinate, or supervise action by enforcement agencies. Also, HSNO provides only limited powers to enforcement agencies to act in cases where a recipient cannot comply with a compliance order.

While changes are needed to address immediate hazardous substances contamination issues, we note longer term action is needed to remediate the adverse effects of hazardous substances released to the environment. Both alternate vehicles (the RMA and the CSRF) also have significant shortcomings in minimising the risk that the public will bear the cost of such actions.

1. Replace time limits on the emergency powers contained in Part 9 of HSNO with risk-based limits

Rather than limit the extent of an enforcement officer's emergency powers to 96 hours – a time period that may be insufficient for abating the emergency – an enforcement officer should be able to exercise power until the 'emergency' (as defined in s 135) is over or until a longer-term

action to abate the emergency is established (for example, an enforcement order under the RMA or a compliance order under HSNO). Replacing the time limit with a risk-based limit will not only ensure enforcement officers have the authority to act in an emergency but will reduce delay in debating the most effective legal regime under which to proceed.

2. Provide authority for an enforcement agency to comply with compliance orders on behalf of a non-compliant recipient

Amending s 104 of HSNO to provide authority for an enforcement agency (or any person) to comply with a compliance order issued under that section on behalf of a non-compliant recipient would permit enforcement agencies to act in non-emergency situations that still pose a risk to human health or the environment. This authority would be analogous to that provided to 'any person' in s 315(2) of the RMA (related to enforcement orders), which also allows cost recovery from the non-compliant subject of the enforcement order.

3. Provide the EPA with concurrent HSNO enforcement authority across the hazardous substances system

Given the risks of agency inaction posed by HSNO's diffused enforcement responsibilities, consider amending s 97(4) of HSNO so it provides the EPA with the full concurrent authority to act directly to enforce the provisions of HSNO, following consultation with the primary responsible agency. This would permit the EPA independent authority to carry out compliance monitoring, oversee compliance and enforcement being carried out by other enforcement agencies, and, most importantly, to act without delay in any situation where EPA considers the 'first line' responsible agency has failed to act. The new EPA function in relation to enforcement of the Act should not be unfettered. The exercise of any concurrent enforcement powers should follow consultation with the lead agency. To ensure this new power could only be used sparingly (as a regulatory system backstop option), criteria would need to be developed to ensure EPA's step-in enforcement power is able to be exercised only as a proportionate response to the risk of serious regulatory under-performance and risk of harm.

4. Provide explicit cost recovery mechanisms in HSNO for any agency acting on its emergency powers or any person complying with a compliance order on behalf of a non-compliant party, analogous to those in the RMA

The RMA explicitly provides that any person acting under s 315(2) to comply with an enforcement order on behalf of another person may sell or otherwise dispose of any structure or materials salvaged in complying with the order and recover any remaining costs and expenses as a debt due from that person. It further provides any unpaid costs or expenses may be registered under the Statutory Land Charges Registration Act 1928. In addition, s 331 of the RMA allows local authorities to require reimbursement of actual and reasonable costs incurred in the exercise of any emergency powers due to a default of any person. Reform of HSNO could potentially go further in allowing a charge to be registered against the title to property where costs will be (but have not yet been) incurred by the EPA.

In addition, the EPA may also want to consider whether the parties held responsible for cost recovery under HSNO should include responsible parties (for example, persons that sent hazardous waste to a site without performing due diligence) that were not identified at the time a compliance order was issued but would have been subject to the order had they been.

As has been observed in dealing with Concours a primary disincentive for an enforcement agency to act under HSNO is the lack of robust funding or cost recovery mechanisms to take on expensive clean-up actions. As discussed, this is also contrary to the 'polluter pays' principle.

5. Review and reduce the number of hazardous substances regulatory agencies

The enforcement regime under s 97 is complex. Enforcement responsibilities and powers are shared among 85 agencies. Most of them (76) are local authorities. We recommend the agency roles be reviewed in light of our findings and the number of them reduced.

There is no need for the MOH to have an explicit role in s 97 of HSNO. Its role is subordinate and only in relation to public health. The Health Act provides a sufficient mandate for them to meet their statutory duties and achieve their mission.

The roles of territorial authorities should also be removed from s 97. Theirs is also a limited enforcement role. Subject to negotiation and agreement with the local government sector those roles can be transferred to regional and unitary

councils. We consider most regional and unitary councils have the requisite capability and capacity and are therefore better placed to perform the local government hazardous substances CME roles. One or other major metropolitan council may choose to have an ongoing role. We don't wish to exclude that possibility.

If these changes cannot be made within the provisions of HSNO relating to transfer of powers and delegations, then we recommend amending s 97. The net effective of these changes would be to reduce the s 97 enforcement agencies to around 17. We note a change in the functional split between WorkSafe and the EPA is out of scope of our terms of reference.

Policy and practice

This section of the report deals with several policy and practice matters. Foremost among them is our concern HSNO does not provide the clear leadership duty for the hazardous substances CME system. We think a leadership duty must be inherent in a fit for purpose system. This may be something that requires legislative change, but we raise it as a policy issue in the interim. We do so in the knowledge there are non-statutory work-arounds such as protocols and MOU as well as the potential for differing interpretations of existing powers.

Although the EPA has the regulatory responsibility to ensure the provisions of HSNO are being enforced, it has limited authority to carry out that responsibility. Further, as observed on the ground, HSNO's diffusion of enforcement authority makes it difficult for any agency to act swiftly and easy for all agencies to disclaim responsibility for acting – heightening the risk of regulatory failure.

Providing the EPA with clearer powers to coordinate and give guidance relating to HSNO enforcement nationwide and the power to take concurrent action regarding HSNO non-compliance (particularly in urgent situations) could reduce those risks. The power to compel agencies to provide information is another.

6. Agree (between MfE and the EPA) on system leadership roles

MfE is the Ministry responsible for HSNO and the EPA is the Crown Entity most responsible for implementing it. Coordinated effort between them is required to effect change. MfE will need to take the lead for promoting statutory or regulatory reform to remedy the gaps or overlap we have identified. We envisage advice to the Government on creating a system leadership duty in law would be an outcome of this coordinated effort and dialogue.

At a more operational level the EPA should coordinate a National Council of Hazardous Substances Regulatory Authorities to create a forum for the exchange of information on operational experiences and to address issues of coordination when there are overlaps of authority and responsibility. This should also be extended to a regional level.

The EPA could be given statutory authority to conduct Audits of Competency to ensure individuals who have responsibility for the different aspects of enforcement are properly trained, accredited and subject to continuous professional development obligations. Reports to the Minister for the Environment should highlight any defects in agency performance that Audits of Competency reveal.

CME agencies should each develop Compliance and Enforcement Strategies that would cover expectations on users of substances about how they are expected to meet their compliance obligations, and a statement of intent about how the agency intends to use its enforcement powers.

7. Create the duty of hazardous substances regulatory system leadership in law

The EPA is responsible for coordinating and supervising enforcement agency activity. We understand that is how the EPA sees its leadership duty. HSNO does not contain an explicit leadership duty in relation to CME system performance. It should – especially given the risks presented by the multi-agency/place based set of accountabilities HSNO contains.

Under an enhanced leadership duty, the EPA would have independent powers to carry out compliance monitoring, to oversee the activities of the other regulatory agencies, and to act in any situation where the responsible agencies have failed to act.

We have considered the option of the EPA having the sole regulatory mandate but are not advancing it as it is beyond the scope of our terms of reference. We just observe it is likely to be the simplest and best way of achieving effective and efficient hazardous substances regulatory system performance.

If a change to HSNO to create a system leadership duty in all of its facets is not progressed, the EPA must be given the clear authority to enforce all of its responsibilities, the power to require information from other regulatory agencies being one of them.

8. Provide the EPA with authority to compel HSNO enforcement agencies to supply information

If the EPA is to be responsible for determining whether enforcement agencies are carrying out insufficient or unnecessary inspection and compliance, and have overall responsibility for the enforcement of HSNO, at a minimum HSNO should authorise the EPA to compel these agencies to provide reports and information relating to the performance of their HSNO responsibilities. This power would be analogous to that provided to the Ministry for Primary Industries (MPI) under the Food Act (2014). However, in addition, the EPA should consider requesting explicit authority to recommend or compel agencies to change how they carry out enforcement roles under HSNO, or, alternatively, to impose coordination requirements on any agency the EPA determines is carrying out insufficient enforcement.

There is a further issue with the lack of authority for agencies to require regular reporting by parties handling hazardous substances that could enable early identification of premises requiring inspection or posing risks. These substantive issues bear further consideration for legislative reform – or potential regulations or EPA Notices. However, in the short term, the EPA should explore the suggested legislative reforms as those would permit the EPA to have sufficient information regarding HSNO non-compliance nationwide in order to fully understand the scope of other substantive issues.

9. Increase the use and effectiveness of EPA appointed enforcement officers

The EPA has the authority to notify enforcement agencies and the Minister when it considers the agency has performed insufficient inspection and enforcement activity. Being more proactive and issuing notices when the non-compliance and/or inactivity presents a particular risk to human health or the environment will better enable the EPA to perform its statutory role. When these notices are combined with the appointment of EPA warranted enforcement officers, the EPA would be better able to show it is fulfilling its regulatory oversight role.

10. Establish a working group from among the EPA, MfE and WorkSafe to expand and improve the suite of tools (statutory and non-statutory) available to regulatory agencies

The HSNO enforcement regime is deficient in the lack of authority and the suite of tools it gives an enforcement agency to act to abate, remedy or mitigate a risk to people or the environment

particularly in an emergency. We recommend the power to act directly be granted to the regulatory agencies to meet the obligations in a compliance order on default by a recipient. We have commented elsewhere on the need for supporting cost recovery powers and the analogous powers in the RMA relating to Enforcement Orders.

There are some wider issues concerning the regulatory intervention tools available to regulatory agencies under HSNO which force choices about which agency is most appropriate to lead and even which statute agencies will default to.

We recommend in addition to introducing ‘step in’ powers to HSNO, the Act be amended to provide for the issue of Enforcement Orders and associated infringement fines for non-compliance.

We have not considered the scope of the amendments in detail. As a matter of principle, we recommend the suites of tools in the allied laws (the RMA, HSWA and HSNO) be harmonised.

Tools alignment would make the regulatory work and approach of agencies consistent. It will give all of them the flexibility to ensure the principles they espouse in relation to enforcement action can be met. These principles are embedded in national and international advice about regulatory best practice and include matters such as proportionality, transparency, consistency, accountability and fairness and equity.

As a first step and precursor to possible law changes, a working group from EPA, MfE and WorkSafe should be established to review the tools and range of enforcement powers available to each agency with hazardous substances CME responsibilities, with a mandate to report to the Minister for the Environment if it finds these tools and powers to be inadequate.

11. Align trade and HSNO classification

Customs and the EPA should commission a programme of work that has the objective of aligning trade classifications of hazardous substances with HSNO classifications, or provides for a cross-referencing system that allows the EPA to approximately estimate volumes of categories of hazardous substances that are imported. The rationale for this recommendation is that we currently do not know what volumes of hazardous substances are being imported. This has implications for risk assessments, waste disposal, any proposals for weight or volumetric-based levies and so on.

12. Establish a hazardous substances Inventory and Transfer Database

Transfers of hazardous substances, from manufacturer or importer to commercial and industrial users, and between users, should be documented as changes to the inventory and logged in the central database. Subject to a materiality threshold, businesses and other organisations that have hazardous substances on their premises should be required to construct an inventory of their holdings, to review that inventory annually, and to log the inventory on a central database, ('track and trace' 'volume and place').

The obligation to construct and maintain an inventory should be limited to quantities and combinations of hazardous substances that would otherwise trigger the requirement on organisations to have an Emergency Response Plan, in order to ensure it is cost effective and not cluttered with excessive detail. That is to say there needs to be a risk-based assessment of materiality.

There needs to be an intensification of internet surveillance systems in an attempt to identify and intercept illegal importation of hazardous substances, and sales of hazardous substances that do not comply with conditions of approval (packaging, labelling, safety data sheets and so on).

13. Lift the nation's awareness and understanding about the importance of hazardous substances

We have noted in this report the purposes of HSNO and the HSWA focus on the potential and real adverse effects of hazardous substances on people and the environment. The critical role these hazardous substances play in our everyday lives, in achieving community well-being and in the functioning of a civil society, is under-played.

Nationally, the environmental debates are focused on water quality and use and on carbon and climate change. We are not proposing that hazardous substances, their use and management, displace one of the nation's current environmental priorities – far from it. We are however saying a greater awareness of the importance of these substances, politically and across society, is a precursor to dealing with some of the statutory, structural, and resourcing (funding) issues the system is facing.

When approving a hazardous substance, the EPA should explore the possibility of identifying its primary use as a method of improving public awareness of the benefits it offers, to balance risks of detriments it may cause.

14. Resolve the complexity in the law and in practice surrounding the roles and responsibilities of agencies in managing hazardous waste

Hazardous waste and hazardous substances waste management is one of the major shortcomings in the hazardous substances regulatory system that must be remedied. Management currently occurs across a fragmented legal landscape, with no single agency responsible for regulation and enforcement.

The recommendations we have made concerning system leadership, information and partnerships, role clarity, and where the capability and capacity to respond to non-compliance and incidents should lie are as relevant to end of life management issues as they are to other life cycle stages.

The disposal of hazardous substances surplus and the disposal of hazardous waste is where many risks associated with hazardous substances manifest themselves. Transport, storage and treatment is complex and costly. What capacity there is to treat hazardous waste is unevenly distributed regionally and international disposal options are being foreclosed. Legacy issues are created, and costs typically fall on communities and government.

Most hazardous waste originates from workplaces — clearly under the regulatory mandate of WorkSafe. We are aware WorkSafe is developing operational policy and guidance and building capacity to meet its obligations.

The EPA has limited regulatory and enforcement functions, mainly related to setting conditions for the disposal of hazardous substances during the approval process, and setting conditions for the disposal of persistent organic pollutants (POPs) as recently exercised around legacy PFAS-containing fire-fighting foam.

Regional council functions are limited to the RMA consenting processes and to enforcing the provisions of regional plans where unauthorised discharges to the environment have occurred. Territorial authorities have some functions under HSNO, Health Act and RMA.

15. Develop a regulatory and policy structure for hazardous waste

Developing a regulatory/policy structure for the management of hazardous waste should include:

- reviewing (by MfE) of the full range of statutory and regulatory provisions that relate to the definition, properties and levels of toxicity that apply to hazardous waste and hazardous waste products
- updating (MfE to lead) the regulatory provisions governing the collection, transportation, storage and disposal of hazardous waste, including penalties for breaches of statutory obligations
- inviting Treasury (MfE and the EPA to lead) to establish a working party examining options for the treatment and financing of clean-up operations on sites contaminated by substances that were once legal but have since been outlawed by changes in the classification of substances. Consideration should also be given to orphan sites due to non-compliant business operators.

16. Extend access to CSRF

In Concours, the Crown negotiated with the owner in order to transfer ownership of the property to Timaru District Council, which allowed the site to be remediated using the CSRF. As a result of these negotiations, no prosecution or monetary fine was assessed against the owner. The EPA and MfE may wish to consider whether HSNO (and CSRF policies) should explicitly permit enforcement agencies to seek funding or cost recovery from the CSRF for actions taken to address immediate risks at sites where there is no identifiable or solvent liable party.

These changes should provide an avenue for access to the CSRF that does not also require negotiations with a liable party permitting them to avoid costs and prosecution, although this would require further discussions and development. Although we understand MfE may not believe CSRF is well-suited for this purpose and should instead be reserved for remediation of sites with no liable parties, there may be efficiencies in utilising the existing fund to address a situation (insolvent liable parties) that leads to the same result.

17. Create alternative funding mechanisms

We also recommend the EPA explore reforms permitting the EPA or other enforcement agencies to collect funds that could be used to offset costs for clean-up actions where costs cannot be recovered from responsible parties. Creating alternative funding mechanisms would bring the system in line with the 'polluter pays' principle, as well as lifting potential barriers to action by enforcement agencies.

One possibility would be an explicit requirement in HSNO that a percentage of all penalties

paid as a result of a HSNO prosecution go to a fund to be used for such purposes. Another option might be for the EPA and councils that grant approvals or consents related to activities involving hazardous substances to charge an additional fee for all parties going to such a fund in order to cover potential costs.

Depending on discussions with MfE, this money could go to the CSRF or to a central fund managed by the EPA. We note some councils, such as the Bay of Plenty Regional Council, include an annual fixed charge for some types of consent in order to offset the cost of permitted activity monitoring, but most do not and there is some controversy regarding whether this is appropriate. Thus, this idea could be controversial, but bears more discussion.

18. Create civil liability for loss or damages

Section 124G of HSNO permits civil liability for persons related to certain acts or omissions related to new organisms. MfE and MBIE may wish to consider whether an analogous provision related to the manufacture, use, storage, or disposal of hazardous substances in contravention of the Act may be appropriate. They may also wish to consider whether such liability should be strict, or joint and several, in order to ensure ratepayers and the Government are not bearing most of the burden imposed by contaminated sites.

19. Introduce financial assurance mechanisms to mitigate the risk of clean-up costs falling unfairly

Mechanisms are needed to protect communities from the cost of cleaning up sites that are or may become contaminated with hazardous substances. While financial bonds are used in some local jurisdictions (the RMA for example), financial assurance instruments don't feature in the hazardous substances regulatory system to the extent they do overseas.

They should feature because it is inequitable that communities and governments should be 'first call' funders for site clean-up and remediation. There is one exception to this and that relates to legacy issues arising from 'once approved now banned' substances. We think those remain a government responsibility.

We have not fully evaluated the options but recommend both carrot and stick approaches. That typically involves some form of financial warranty (backed by assurance testing) and underpinning by a strict liability offences regime. In Europe and the US especially, this type of arrangement is generally supported by clean-up funds sourced from general revenues or industry levies.

In New Zealand the CSRF has this role, but it is not sourced from industry levies. That fund is inadequate if it is to be used for the remediation of hazardous substances contamination sites (both retrospective cancellation of approval and abandoned sites). The fund would need to be increased substantially to meet future needs.

Financial assurance mechanisms include lender liability arrangements; insurance; warranties via indemnity agreements; bonds; and personal and corporate guarantees.

Regulatory agency operations

This section of the report deals with recommendations relating to regulatory agencies' approach to their roles – as it affects system performance. The regulatory split between WorkSafe and EPA is recent, and indications of operational performance are still emerging. There will be a need to monitor performance to see if further improvements are warranted. Regulatory agencies have a reasonable amount of discretion in the approach they take to their powers, functions and duties. They have adopted policies and practices consistent with accepted regulatory best practice.

It is beyond the scope of our terms of reference to examine how agencies make those decisions or where they set the bar for various regulatory and non-regulatory interventions. We do however have a view about the influence of some of those decisions on system performance. One of those relates to the EPA and how it achieves national reach currently or might do so under a stronger system leadership mandate.

20. Develop a national delivery role and operating model for the EPA

An increase in capability and capacity as well as a regional presence will be needed if the EPA takes a stronger leadership role in the hazardous substances CME system, as we recommend. An enhanced leadership role could be the result of a change of its strategic priorities, or in the law.

The EPA's delivery options include building capability and capacity centrally and delivering from the centre or building regional (distributed) capability and capacity. There are at least two ways of doing the latter; in-house or out-sourced.

We think it is unlikely the EPA could justify the cost of building its own capability and capacity to fulfil an enhanced system leadership function and deliver it nationally. Further, it would not

help system performance to have yet another organisation with people in the field. That said we consider there is scope for an EPA-based centre of excellence to provide active support to regional and unitary councils (under our preferred model) in their delivery role – a flying squad, if you like.

Some form of relationship or service delivery agency agreement is indicated. If the role of regional and unitary councils is changed as we recommend, then those organisations are the obvious partners. Although it is beyond the scope of our terms of reference, we observe the Government's aim of strengthening of the RMA performance in the local government sector could be similarly resourced and progressed.

An extension of this could be for the EPA to co-locate staff within the regional councils and unitary authorities. EPA Victoria has deployed a similar programme which could have applicability in this context. As we have noted, FENZ also has the potential to provide a national pool of focused professionals. With enhanced training, they could offer the EPA the opportunity to improve the 'reach' of the hazardous substances CME system and enhance its performance.

21. Leverage industry and trade-based bodies as an integral part of the hazardous substances regulatory system

The regulated are an integral part of the hazardous substances CME system. We were impressed by the extent to which industry sector groups contribute positively to system performance. The New Zealand Association for Animal Health and Crop Protection (AGCARM) is one such example. There are others, and there are some gaps.

We recommend the regulatory agencies take a lead in developing and enhancing their relationships with all relevant sector groups. The EPA especially should be the catalyst for others to form where the benefits of doing so are demonstrable.

Benefits to the regulatory system will accrue from voluntary/non-statutory:

- product stewardship arrangements
- environmental reporting obligations
- chemical data and tracing reporting requirements
- corporate social reporting responsibilities
- personal and director liabilities for performance failures.

22. Continue the approvals modernisation programme

The EPA should continue its current programmes to modernise approvals in line with advances

in the scientific evidence, to approve new and improved alternative substances more suited to their intended use, and to pursue the introduction of the trusted regulator mechanism.

23. Make the report on HSNO enforcement activity more relevant and useful

The information sought from and provided by HSNO enforcement agencies for the EPA's annual report on HSNO enforcement activity is transactional and doesn't enable analysis related to the health and environmental risks identified in the past year. Nor does it enable judgements to be made about the alignment of future investment in time and resources based on strategic priorities; identified non-compliance trends; reasons for changes in activity; and compliance tool use and effectiveness.

24. Improve information flows across agencies to enable intelligence-based system development and performance

Any fit for purpose CME system must be intelligence-led. The regulatory system approves hazardous substances (or not) but not the volume of them. The volumes manufactured or imported are not recorded. While there is a materiality issue to be addressed, we recommend a 'track and trace' system be introduced for a broader range of hazardous substances than currently exists.

Some of the most hazardous substances require tracking now. As far as we can ascertain a person or entity in control of a workplace is responsible for maintaining the record, including receipt, transfer and disposal. They have a duty to provide certain persons including WorkSafe inspectors with access to tracking records. There is no central database. We think having the latter is critical to managing risks, making the right intervention choices and to system performance overall. The system information gap is broader than the 'track and trace' aspect.

In the system leadership role we propose for the EPA, it will need information to gain a better understanding of the regulated community, the regulatory challenges faced by the regulatory agencies, those agencies' performance, and the extent to which the purposes of HSNO are being achieved.

Some of those needs can be met through smart use of information technology but some will require a re-investment in personal relationships across organisations. In the past Hazardous Substances Technical Liaison Committees helped serve this purpose.

25. Monitor operational effectiveness of recent legislative split

The regulatory split between EPA, WorkSafe and local government is now bedding in. Aspects of system performance need to be kept under regular independent review. That review would examine:

- levels of compliance
- effectiveness on controls of eco-toxic hazardous substances
- usefulness of the Hazardous Substances Calculator.

Without such monitoring, current intentions need to be taken on trust.

26. Develop assessment guidelines for managing hazardous substances

MfE and the EPA should develop guidelines and assessment tools for the management of hazardous substances under the different applicable statutes and regulations, and communicate those to the responsible agencies.

27. Develop an EPA Hazardous Substances Bulletin

The EPA should issue reader-friendly bulletins when the status of any hazardous substance changes, and when any new hazardous substance is introduced, to establish public credibility about the rigour applied in assessing which hazardous substances are allowed to be used.

We also recommend the EPA explores the potential to develop communities of interest to comment on and engage in the public discourse on the validity of the use of various substances that are controversial such as with Forest and Bird on the use of 1080, or with farmer organisations on the use of various herbicides and pesticides. This will require developing a capacity to engage in active support to defend decisions that are the subject of public criticism.

We note other regulatory agencies produce newsletters informing users of substances about examples they have encountered of good and bad practice, and reporting on any enforcement actions undertaken.

28. Undertake education campaigns

The MOH and Accident Compensation Corporation (ACC) should fund a nationwide publicity and education campaign targeting the safe storage of dangerous substances (such as cleaning fluids) that pose particular risks to children. Oversight of the campaign should involve relevant government agencies, including the EPA.

29. Build trust and confidence in industry

Government agencies that have close associations with industry organisations (such as MPI with agricultural hazardous substance suppliers, MBIE with industrial hazardous substance companies), should encourage those bodies to take an active role in encouraging users of substances to develop robust compliance processes.

30. Improve the relationships between and level of cooperation among the HSNO enforcement agencies

While our preference is for the law to provide the duty of system leadership, having an MOU or using guidelines is one way to overcome some of the difficulties with the multi-agency and place-based accountability arrangements in HSNO. These MOU/guidelines should set out when notification to the EPA of a non-compliance event is to occur, which agencies will lead under different scenarios, how coordination will happen and what actions will be taken.

While we don't see MOU and the like as substitutes for clear accountabilities in law, they could be used to set enforcement priorities for the regulatory agencies, enable performance against those priorities to be assessed and in turn the performance of the whole hazardous substances CME system.

31. Improve professional development across the system

The EPA and WorkSafe should develop a professional development programme for Hazardous Substances Warranted Officers, Approved Handler Certifiers, and Site Compliance Certifiers to ensure competency, consistency and growth of the profession.

Relevant matters beyond our scope

We are aware of work at central government level and independently on reforming the Resource Management System, and the way our natural resources are managed more generally. The nation's broader environmental regulatory and protection framework is the focus and there has been talk of an overarching 'Environmental Protection Act' among other models. The scope of this work is wide and certainly it is beyond our terms of reference.

That said, we want to signal there are some limitations within HSNO which could be addressed as part of any future reform. Preferably these shortcomings should be addressed sooner.

The inability of all hazardous substances regulatory agencies to have access to the same set of regulatory intervention tools concerns us, as does the lack of flexibility in the authority to transfer or delegate powers to another regulatory agency.

There is a lack of harmony between the HSNO regulatory tool kit and those tools in the RMA. As a result, jurisdictional issues arise. Local authorities default to what they know (the RMA), even when it is a hazardous substance that is the catalyst for action.

The lack of a central environmental authority is also a concern.

The EPA's recent experience of incidents illustrates activities involving hazardous substances regulated by HSNO are inevitably linked with the RMA; from consents required to undertake activities to any required long-term remediation.

Unlike most other countries, New Zealand does not have a strong central environmental regulator with RMA and related statutory oversight to provide guidance and coordinate enforcement among the agencies, or with concurrent enforcement authority.

The 2017 report by the Environmental Defence Society, noted this led to a wide variation in council practice, in addition to the other problems. This observation was echoed in the 2017 OECD Environmental Performance Review, which further noted non-compliance with environmental requirements in New Zealand was "*relatively high*" and "*local authorities lack adequate enforcement capacity.*"

Given the links between HSNO and the RMA, the EPA would be well-positioned to fill the role of such a central authority (or one of the central authorities) that can help ensure consistent application of requirements and promote best practice guidance.

A number of reforms we have highlighted in this report, if not actioned sooner, should be considered as part of the broader environmental regulatory and protection framework review.

References

Documents

Brown. M. A., 2016. Last Line of Defence: Compliance, monitoring and enforcement of New Zealand's environmental law. Environmental Defence Society, New Zealand

Civil Aviation Act 1990

Environmental Protection Authority, 2012. Technical Guide: HSNO Enforcement Agencies – Roles and Responsibilities: identifying a lead agency following a hazardous substance non-compliance incident, May 2012. New Zealand Government

Environmental Protection Authority, 2017. Additives, Process Chemicals and Raw Materials (Combustible) Group Standard 2017 – HSR002490: Group Standard under HSNO 1996. New Zealand Government

Environmental Protection Authority, 2017. Cosmetic Products Group Standard 2017 – HSR002552: Group Standard under HSNO 1996. New Zealand Government

Environmental Protection Authority, 2017. Surface Coatings and Colourants (Combustible) Group Standard 2017 – HSR002657: Group Standard under HSNO 1996. New Zealand Government

Environment Protection Authority Victoria, 2018. Compliance and Enforcement Policy. EPA Victoria, Australia.

Environmental Protection Authority, 2016. Hazardous Substance Compliance Programme 2016 – 2020, October 2016. EPA, New Zealand.

Environmental Protection Authority, 2017. Monitoring the effectiveness of hazardous substances and new organisms' controls. EPA, New Zealand.

Environmental Protection Authority, 2017. EPA Annual Report for the year ended 30 June 2017. EPA, New Zealand.

Environmental Protection Authority, 2017. Report to the Minister for the Environment – Activities and Intentions Report 16/17. EPA, New Zealand.

Environmental Protection Authority, 2017. Report to the Minister for the Environment – Enforcement of the Hazardous Substances and New Organisms Act 1996, December 2017. EPA, New Zealand.

Fire and Emergency New Zealand Act 2017

Hazardous Substances and New Organisms Act 1996

Health Act 1956

Health and Safety at Work Act 2015

Land Transport Act 1998

McDonald. K, 2019. Inquiry into the Performance of the New Zealand Transport Agency in relation to Dargaville Diesel Specialists. New Zealand.

Maritime Transport Act 1994

Ministry for the Environment, 2018. Best Practice Guidelines: Compliance, Monitoring and Enforcement under the Resource Management Act 1991. New Zealand Government

Minister for the Environment on introduction of the Hazardous Substances and New Organisms Bill 1994, Hansard, 8 November 1994, 4603

OECD, 2005. Best Practice Guideline for Regulatory Policy – The Governance of Regulators. New Zealand

Office of the Auditor-General, 2007. New Zealand Customs Service: Collecting customs revenue. New Zealand Government.

New Zealand Treasury, 2017. Government Expectations for Good Regulatory Practice. New Zealand.

Productivity Commission, 2014. New Zealand Productivity Commission Report: Regulatory Institutions and Practice. New Zealand

Regulatory Impact Statement 1994 (<https://treasury.govt.nz/publications/risa/regulatory-impact-statement-improving-new-zealands-workplace-health-and-safety-system>).

Report of the Committee on the Bill, Hazardous Substances and New Organisms Bill, Appendices to the Journal of the House of Representatives, 1995, I.26A.

Rio Declaration on Environment and Development 1992

Research NZ, 2015. HSNO Compliance Survey 2015: Horticulture, Metal Manufacturing and Timber Treatment Sectors – November 2015. Research New Zealand.

Research NZ, 2012. Survey of Industry Compliance with Hazardous Substance Controls, June 2012. Research New Zealand.

Research NZ, 2014. Survey of Industry Compliance with Hazardous Substance Controls, October 2014. Research New Zealand.

Resource Management Act 1991

Sparrow, M.K. (2000) The Regulatory Craft: Controlling Risks, Solving Problems, and Managing Compliance, Brookings Institution Press, Washington D.C., 2000.

TCC (NZ) LTD, 2013. EPA SDS Audit 2013 – A Survey of the compliance levels of New Zealand Safety Data Sheets, commissioned by the EPA.

Zaman, et al. 2016. Regional Sector Strategic Compliance Framework 2016-2018

Websites

<https://www.mfe.govt.nz/more/hazards/about-environmental-risks-nz/laws-help-us-manage-environmental-risks/how-hsno-act>.

www.epa.govt.nz

www.worksafe.govt.nz

List of Abbreviations

Abbreviations	
ACC	Accident Compensation Corporation
AGCARM	New Zealand Association for Animal Health and Crop Protection
BAuA	Federal Institute for Occupational Safety and Health
CBD	Central Business District
CEO	Chief Executive Officer
CERCCA	Comprehensive Environmental Remediation, Compensation and Liability Act 1980
CME	Compliance, Monitoring and Enforcement
COSHH	Control of Substances Hazardous to Health
CSRF	Contamination Sites Remediation Fund
Customs	New Zealand Customs
DHB	District Health Board
EPA	Environmental Protection Authority
EU CLP	European Union Classification, Labelling and Packaging
FENZ	Fire and Emergency New Zealand
FTE	Full-time Equivalent
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
GST	Goods and Services Tax
HS	Hazardous Substances
HSE	Health and Safety Executive
HSMoD	Hazardous Substance Modernisation Project
HSNO	Hazardous Substances and New Organisms Act 1996
HSWA	Health and Safety at Work Act 2015
ICAO	International Civil Aviation Organisation
IMDG	International Maritime Organisations International Maritime Goods Code
MBIE	Ministry of Business, Innovation and Employment
MfE	Ministry for the Environment

Abbreviations

MOH	Ministry of Health
MOU	Memorandum of Understanding
MPI	Ministry of Primary industries
NZ	New Zealand
NZ Police	New Zealand Police
NZTA	New Zealand Transport Agency
OECD	Organisation for Economic Co-operation and Development
PFAS	Per and Poly-fluoroalkyl Substances
PFOS	Perfluorooctyl Sulfonate
RC	Regional Councils
RMA	Resource Management Act 1991
TLATA	Territorial Local Authorities
TWG	Technical Working Group
UK	United Kingdom
US	United States of America
WorkSafe	WorkSafe New Zealand

Appendix 1

Fit for purpose HS system attributes

The list below outlines the required attributes for a fit for purpose system

Appendix 1

1. There is widespread public acceptance the system is balanced, allowing hazardous substances that benefit society to be used, with appropriate checks on their use.
 2. The EPA continues to monitor the evidence that applies and update the science that lies behind approvals of hazardous substances.
 3. The EPA enhances its public relations capacity to affirm the integrity of the approvals regime.
 4. Industry and trade organisations are actively engaged in ensuring their members participate to ensure near universal compliance with regulatory obligations so they can benefit for the potential hazardous substances offer them.
 5. There is an effective monitoring of importation and sale of hazardous substances through internet channels.
 6. The importation and manufacture of hazardous substances are documented in a centralised and easily accessible database.
 7. The storage and use of hazardous substances are documented in an effective database that allows levels of hazard to be monitored and managed.
 8. Any monitoring regime is cost effective.
 9. Any hazardous substances database is fit for purpose, and only records details deemed to be necessary above a materiality threshold. Trivial and 'non-consequential' stockpiles will not be recorded so as to avoid clutter that can obscure the purpose for which information is required.
 10. All points of the system, from manufacture, importation, transportation and storage are tracked and traced to allow for compliance to be enforced (subject to the materiality test).
 11. Users of hazardous substances have a clear understanding of the risk attributes of different hazardous substances, and a user-friendly way to find out about them.
 12. Householders are aware of the risks (especially to children) that common use substances (such as cleaning fluids) pose, store them in safe places and take care to avoid potential health hazards.
 13. Regulators operating under different statutes or regulations understand where their responsibilities and authorities lie and communicate with each other regularly to identify if there are gaps and/or overlaps in those responsibilities and authorities.
 14. People who have statutory responsibility for different aspects of enforcement; certification of premises, handling of substances, inspection, imposition of penalties, are properly trained, accredited and subject to continuous professional development obligations.
-

Appendix 1

15. There is transparency about how regulatory powers are used, and a standardised reporting (by the different agencies) on consistency of application of the relevant rules, as a way of maintaining trust and confidence among those who are subject to regulatory authority.
 16. Each agency has a range of suitable tools and escalating range of enforcement powers at their disposal, and these are clearly communicated to the user communities.
 17. The full range of suitable tools and enforcement powers is used in an impartial and consistent way, and the consequences are recorded and communicated publicly.
 18. Agencies work with relevant industry organisation to recognise and reward good practice, through 'champions', and to encourage best practice through 'ambassadors'.
 19. There is clear and accessible information about what constitutes hazardous waste, and about levels of toxicity about categories of waste.
 20. Statutory obligations for the collection, transportation, storage and disposal of hazardous waste are clarified.
 21. Financial responsibility for the disposal of hazardous waste is sheeted home to the generator of that waste and made enforceable.
 22. Responsibility for historical sites (stranded by retrospective changes to authorisations, changes of ownership and so on) is clearly defined and remedial measures are defined.
-

Appendix 2

List of organisations the TWG engaged with over the duration of the review

Appendix 2

WorkSafe New Zealand

The Environmental Protection Authority

Ministry for the Environment

Ministry of Business, Innovation and Employment

New Zealand Council of Trade Unions

Fire and Emergency New Zealand

Agcarm Incorporated

Business New Zealand

The Catalyst Group

Northland Regional Council

Taranaki Regional Council

Local Government New Zealand

New Zealand LPG Association

New Zealand Customs

Resene New Zealand

Whangarei District Council

Auckland Council

Nelson Marlborough Health Board

Hawkes Bay Regional Council

Responsible Care

Maritime New Zealand

McGredy Winder & Co

Independent RMA Hearing Commissioner

Environment Canterbury Regional Council

Appendix 2

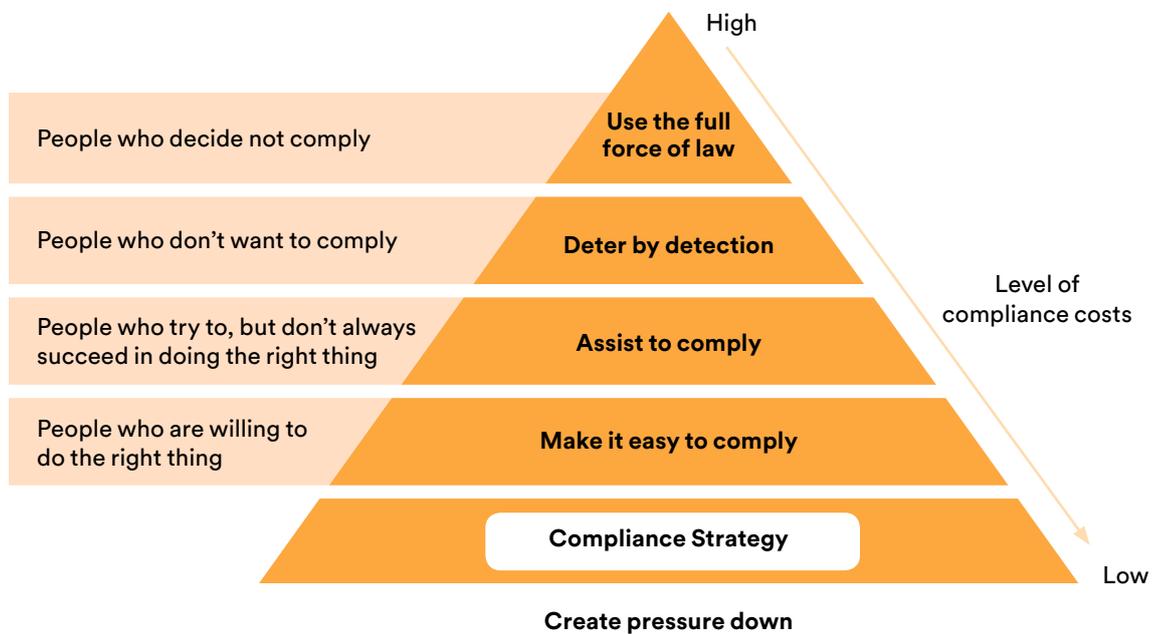
Victoria Environment Protection Authority

Parliamentary Commissioner for the Environment

Cost sharing on polluter pays for environmental clean ups

Appendix 3

Braithwaite Model of compliance and enforcement



Source: Office of the Auditor-General (2007)

Appendix 4

Key features of the CME regime in Part 7 HSNO ACT

Key features of the CME regime relating to hazardous substances under Part 7 of the HSNO Act include:

- Enforcement agencies under the Act are those specified in the report, and, for limited purposes (such as information sharing), include the NZ Customs Service (s97C of HSNO).
- Enforcement agencies can appoint enforcement officers or transfer their enforcement powers to another of the enforcement agencies (subject to certain procedural requirements) (s98 of HSNO).
- Enforcement Officers' powers include giving advice and information, promoting and monitoring compliance, providing information to the EPA if requested, and carrying out all other powers, functions or duties imposed under the Act (s12 of HSNO).
- Both the Chief Executives of MFE and the EPA have the same functions, powers, duties and protections that enforcement officers have under the Act (s98A of HSNO).
- The EPA has a legal duty to ensure that the provisions of the Act are enforced in all premises likely to contain a hazardous substance, and is required to advise enforcement agencies and the Minister for the Environment if the EPA considers there is insufficient or unnecessary inspection and enforcement (s99(1) of HSNO).
- In addition to the express authority to appoint enforcement officers in relation to its specific enforcement role specified in the table above, the EPA has a power to *appoint enforcement officers to enforce the provisions of this Act in such premises as the [EPA] sees fit (s99(3) of HSNO).*
- Enforcement officers are required to meet prescribed standards before they are appointed.
- Where the Minister for the Environment considers that a territorial authority is not exercising powers to achieve the purpose of the Act, the Minister can, after consulting the Minister of Local Government, appoint the EPA to exercise or perform all or any of the relevant functions, powers or duties in place of the territorial authority (s101 of HSNO).
- Enforcement Officers have powers of entry and inspection and the taking of samples (s103A HSNO).
- Enforcement Officers can issue compliance notices requiring certain activities to cease or prohibit them from taking place (s104 HSNO).
- Infringement offences can be created by regulations and where that occurs and a relevant offence committed, an Enforcement Officer can issue an Infringement Notice (s110, 111, 112 of HSNO).
- Non-Infringement offences are created under the Act and charges must be laid within a 6 month timeframe (subject to the power of the Court to extend the timeframe) (s109 and 109A of HSNO). Penalties include a maximum of 3 month prison term and fines (s114 of HSNO).
- Search warrants can be issued in certain circumstances, and must be executed by Police (s119 of HSNO).
- Enforcement Officers can declare a hazardous substance emergency in certain circumstances, the declaration of any such emergency making specified emergency powers available (s136 and 137 of HSNO).

Appendix 5

Technical working group members

The Technical Working Group was appointed by the Ministry for the Environment and the Chief Executive of the Environmental Protection Authority.

Lisa te Heuheu (Chair)

Lisa is of Ngāpuhi, Ngāti Raukawa and Ngāti Maniapoto descent. She currently works as a consultant for her company established in 2008, which specialises in natural resource management, primary sector and, strategy and framework development for iwi, private companies and the public sector.

Lisa was appointed Tumuaki (chair) of Ngā Kaihautū Tikanga Taiao on 1 July 2017 and holds governance positions on Te Wai Māori, Dairy NZ - Low N Livestock Research Programme and Queens University (Canada). She has also had previous roles supporting international indigenous participation in UNFCCC in both a technical and governance capacity.

Peter Harris

Peter was a university lecturer in economics before joining the PSA's research division, producing research and policy advice and building the PSA's research capability. He was head of the technical services division at the NZ Council of Trade Unions and its main spokesperson on economic issues. He later served as economic advisor to Michael Cullen, Minister of Finance, and is now a consultant engaging extensively in workplace issues. He is a former board member of the Electricity Commission and the Electricity Authority Establishment Board, and was a member of the Expert Advisory Panel for the Electricity Price Review.

Lindsay McKenzie

Lindsay has had a career-long interest in science disciplines and environmental management. Born in Invercargill, he completed his tertiary education at Otago University then worked at Southland Regional Council where he became general manager. He later became the Chief Executive of Gisborne District Council, and then Chief Executive Officer of Tasman District Council in 2012, a position he held until May 2018. He is now an independent contractor and company director.