# Attachment 1 - Environmental Regulation

Q19. Is there a gap in the existing regulatory system with respect to the environmental impacts of chemicals and plastics? If so, do you see the National Framework for chemical Environmental Management (NChEM) proposals as a good way to fill that gap?

Q35. Are there specific areas of overlap in regulations that are burdensome and inefficient?

Q48. Are some parts of the regulatory system more acutely impacted than others by lack of intuitional experience and institutional memory?

Q49. Are governments having problems retaining expert staff? If so, what can be done to address the problem?

# **Environment Case Study – NChEM Proposal**

PACIA strongly supports the proposal to develop a national framework for an improved regulatory system to underpin consistent controls of the environmental impacts of chemicals and plastics. However we note that the NChEM model (released in July 2006) appears to ignore the current regulatory models which are available and in place. It is vital that a new model achieves the environmental outcomes through an *improved* regulatory environment – and does *not add* to the regulatory burden and complexity.

PACIA agrees that there are current gaps in the existing regulatory systems with respect to the environmental impacts of chemicals and plastics. PACIA supports a model which would seek to consider scientifically sound data from relevant departments and enhance the current communication and information systems which enable the states and territories provide information to NICNAS and APVMA through the Department of Environment and Water Resources.

PACIA believes the current failures in the existing regulatory system are not due to the lack of powers. They are due to deficiencies and failings to best use existing powers resulting from poor implementation and/or a lack of commitment for effective communication within and between government agencies. In the past, there has been no federal coordination role played by the Department of Environment and Water Resources (similar to the roles played by NDPSC and ASCC for public health and OH&S). PACIA recommends greater communication to increase better governance and accountability and a greater role played by the Department of Environment and Water Resources similar to NDPSC and ASCC.

PACIA believes policy discussion and information flow between National and State and Territory regulators is one of the most important issues to achieve a model which lessens the regulatory burden on industry and strengthens a model to protect the environment.

PACIA also supports the recommendation for NICNAS to explore with states and territories for an improved process for engaging with its MOU group.

## **Features of a Linked System**

PACIA agrees that there should be clear, effective and formalised communication processes between environment agencies and NICNAS so that assessment recommendations take into

account on-the-ground experience of States and Territories and to ensure that any recommendations are action-based, practical and linked with appropriate management tools.

We agree the linking mechanism should be as simple as possible e.g. in theory, NICNAS recommendations for environmental controls *could* come automatically and consistently into force, or be automatically adopted in each of the States and Territories in a consistent way.

However, this mechanism would be completely different to the current mechanisms used to give effect to NICNAS recommendations on public health and OHS. PACIA believes a Regulatory Impact Assessment (RIA) process must at all times be undertaken prior to any recommendation being made mandatory. If theoretically, NICNAS recommendations for environmental controls were to be able to come automatically and consistently into force – the RIA would NEED to be undertaken by NICNAS (or some other agency) prior to that happening. Currently if NICNAS recommendations on OHS are to be converted into law (eg as occurred with the prohibition of chrysotile asbestos), the RIS was undertaken by ASCC – not NICNAS.

PACIA strongly believes it is important and appropriate to have a system for environment which is consistent and integrates with those for public health and OHS.

PACIA believes any framework should not try and duplicate existing powers under relevant state and territory legislation. This is contrary to the Government's commitment to reduce the regulatory burden on industry, and the development of a streamline and harmonised system of national chemicals and plastics regulation. If additional powers were to be given to one agency, then it would be necessary to take away powers from other agencies – to avoid duplication and overlaps.

PACIA supports the NChEM proposal to determine priority and emerging issues with chemicals by applying a model based on scientifically based information collected by government agencies/stakeholders. Such a model must also take into account detailed technical work established by other agencies (NICNAS and APVMA) – state and territory and international conventions to evaluate environmental priorities. PACIA supports the principle for clear, objective criteria and guidelines rather than 'factors' which could lead to subjectivity and the exercise of 'bureaucratic discretion' contrary to COAG principles.

The NChEM proposal must not duplicate existing powers shared by the States and Territory agencies and indeed current federal agencies. This duplication will add costs and a regulatory burden on government and industry. The NChEM proposal must also ensure that 'priority chemicals' are identified by using clear science based criteria consistent with international standards.

### **Current National Initiatives**

An example of a current system which is in use in Australia is the National Environment Protection Council (NEPC) Act which seeks to develop nationally consistent approaches for environmental management in Australia; an approach which PACIA strongly agrees with and endorses.

In the same way that broad stakeholder involvement provides greater synergy and strength for problem solving, guidance and regulation, consistency amongst jurisdictions creates similar benefit. The alternative to a uniform approach is for companies to have to deal with the

requirements of multiple regulatory frameworks and their unique requirements. This in turn adds cost and complexity rather than building workable platforms for necessary progress.

However, our experience suggests that outcomes of the NEPC process have not been as effective or efficient as intended. This has much to do with the nature of the legislation and the fact that a NEPM's development is devolved to a state agency and that ultimate enforcement is left to the States and Territories. As a result, development processes can vary, and implementation, particularly for some NEPMs, has been fragmented. The variation in approach and timing in implementation by States and Territories is also a major deficiency.

PACIA has frequently highlighted the need for consistency in legislation across all Australian jurisdictions. Currently a complex framework of legislation and regulation govern the operations of plastic, chemical and transport companies. This produces an environment of uncertainty, increases costs and increases the administrative burden for companies, particularly those who operate sites in different states. This is a key issue for the Productivity Commission to address.

# **Current Need for Efficiency**

A major area of regulatory overlap is within water, air and waste legislation. The pace of legislative development is proving more difficult for industry to keep up with at times. It requires significant amount of work and detailed technical review in order to remain up to date. Some specific details relating to the inefficiencies are as follows:

- A burden to industry is caused by each piece of legislation addressing a different aspect
  from water, waste to air, with some targeting greenhouse gas production, a focus on
  energy use or others carbon, all of which require a different set of measurements or
  calculations in addition to the time that is spent on attending meetings and consultation
  sessions.
- Often regulators are inflexible about altering details. For example, assisting industry to have greater alignment on reporting periods (the option to report against a calendar year or financial year), but some regulators will not provide flexibility in this regard. PACIA commends the Energy Efficiency Opportunities (EEO) Act (Federal) for allowing industry to choose reporting periods due to suitability to internal company procedures.
- Currently industry could be hindered by various timeframes which have to be met through reporting to Greenhouse Challenge, EEO, National Pollutant Inventory and individual license EPA reporting.
- PACIA notes the EEO legislation requires industry to implement projects where the payback is four years or less, whereas the recently released Draft Victorian Environmental Resource Efficiency Plans (EREP) (Water, Energy and Waste) legislation requires a payback of three years or less.
- In Victoria in 2007, the requirement to undertake an assessment of water savings opportunities (waterMAP) was introduced within a month of the Draft EREP legislation which also requires industry to assess water saving opportunities.
- The QLD Environmental Agency has carriage of regulation in normal day to day business, although the Councils become involved in setting effluent standards where development applicants occur. Currently, EPA legislation is not capable of enforcing clean ups following incidents detrimental to the environment. For major incidents, this is handled by CHEM Services under the DGSM Act as a chemical emergency, or absorbed by the local government as a cost. PACIA believes recovery from an incident could be hampered by the duplication of multiple government agencies.

Industry faces difficulties in their management of water and wastewater issues and at times has competing priorities. For example:

- The increased costs to dispose tradewaste to sewer increases businesses operating costs.
- Potential requirements for on-site treatment of tradewaste (in particular Total Dissolved Solids (TDS)) requires costly capital investment and is also energy intensive.
- The implementation of water conservation measures has meant that at times businesses are unable to meet their trade waste obligations (under tradewaste agreements). For example decreased quantities of tradewaste are discharged to sewer but with higher concentrations of parameters including Total Dissolved Solids. The lack of water to dilute the concentrations of parameters such as TDS limit companies ability to meet their tradewaste obligations.
- The proposed increase in potable water charges also has implications for the industries. In Victoria the Essential Services Commission (ESC) is currently reviewing water tariff structures. As part of this review the ESC is looking at the proposed shift in charging to increase the cost of water for industry above the increase for households. Any increases in water prices for industry will result in increased operating costs for an already highly competitive and trade exposed sector.

# Implementation and Administration of Regulation

Aside from the budgetary and cultural issues that are specific to each regulatory agency, PACIA believes the loss of institutional memory and experience in some agencies has created significant issues for industry for several years. The rise of regulation has seen an increase in industry HSE wages and a subsequent turnover in regulatory staff, as government wages have failed to keep pace.

#### For example:

- Turnover of Victorian EPA client managers has increased over the last three years across the chemicals industry
- Some PACIA member companies have reported that they have been forced into situations of technical non compliance, because the regulator has not had the necessary skilled resources to assess company submissions and either approve or reject them.

PACIA notes the great strain such turnover has on day to day operations for a site due to greater time need by industry to inducting/familiarising/training each new client manager for the specific site.

PACIA recommends a regulatory pay scale – for specialist industry experience to be applied in order to retain experienced regulatory staff in agencies such as the Victorian EPA.

**Example 1:** PACIA notes whereby a company was 3 months late in receiving a licence application approval due to the lack of agency personnel and experience in dealing with specific environmental approvals set on the application for process.

**Example 2:** Industry has experienced with the assignment of junior level officers with no industry experience with the task of drafting environmental emissions policy documents. The representatives had not visited a site in the past but yet were expected to draft quasi-technical documents regarding emission measurements.

However, PACIA notes the loss (or retention) of institutional experience is not solely related to wages. The culture and leadership of an agency are two very important matters which need to also be taken into account.

PACIA believes greater emphasis must be placed for new employees in a regulatory agency to visit and learn from industry/clients as well as from experienced regulators.

There have been a number of very successful two way staff exchange programs in the past between PACIA and PACIA member companies and the Victorian EPA and WorkSafe Victoria. These programs have been exceedingly beneficial in broadening knowledge and enhancing understanding of different policies, priorities and perspectives.

While many regulatory requirements fall within State responsibilities, the drivers for and desired outcomes of these regulations are often similar – indeed, in many cases they derive from an agreed position in relation to a risk that is national or global in its nature.

In both Federal and State regulatory procedures, it is important that Australia take full advantage of the benefits of international efforts – both those of international forums, and the research, testing and certification work done in other countries. Apart from the obvious savings of time and effort that this can represent, it is important for industry competitiveness that standards are uniform to the greatest extent possible.

## Regulatory solutions should:

- be the minimum required to achieve the stated objectives;
- adopt a risk management approach to forming and administering regulation;
- minimise the impact on competition;
- be compatible with international standards and practices;
- cause no restriction to international trade:
- be developed in consultation with the groups most affected and be subject to regular review;
- be flexible, not prescriptive and be compatible with the business operating environment;
- standardise the exercise of bureaucratic discretion; and
- have a clear delineation of regulatory responsibilities and effective and transparent accountability mechanisms.

Nevertheless, the primary concerns of the Chemicals and Plastics sectors in relation to regulation relate to consistency, uniformity and timeliness of regulation. If all levels of government ensured firm adherence to COAG principles and guidelines by all its regulatory agencies, this would, in PACIA's view, provide a basis for this concern to be addressed.

# <u>Attachment 2 – Implementation of the 1996 National Occupational Health and Safety</u> Commission (NOHSC) Major Hazard Facilities (MHF) National Standard

After some five years of development by a tripartite committee of the National Occupational Health and Safety Commission (NOHSC) (now ASCC) involving a Regulatory Impact Statement and formal public comment processes, NOHSC declared the National Standard for Control of MHF in 1996.

It is important to note that NOHSC (and ASCC) National "Standards" are not drafted as legislation, and are not considered or reviewed by Parliamentary Counsel drafters, to ensure they could readily be converted into legislation. PACIA considers this to be a significant flaw in the NOHSC / ASCC development process, which exacerbates the inconsistencies when the national "standard" is converted into enforceable state and territory legislation.

At the time of the Esso Longford gas plant explosion and fire in Victoria in September 1998, when two people were killed, eight seriously injured and Victoria lost gas supply for almost two weeks, neither Victoria nor any of the jurisdictions had moved to adopt the 1996 national MHF standard in legislation, although Western Australia had adopted it to some extent administratively. The Longford Royal Commission Report in June 1999 recommended that the Victorian Government implement Safety Case legislation of the style set out in the 1996 NOHSC National Standard.

# **Delays in adoption**

Today, some eleven years after the National Standard was declared by NOHSC, few jurisdictions have given effect to the 1996 NOHSC standard in regulations.

In summary,

- Victoria declared MHF regulations in 2000,
- QLD regulated MHFs in 2001,
- Northern Territory directly adopted the NOHSC National Standard into regulations in 2005 and
- Comcare gave effect to the National Standard in 2007.

In NSW, WA, TAS and SA, MHF legislation is still being drafted – 11 years after the National Standard was declared. It is noteworthy that the 10 year review of the national standard has already commenced nationally through the Australian Safety and Compensation Council (ASCC) – yet half the states have not yet adopted the original version of 1996,

# **Inconsistency in adoption**

Specific differences exist between the MHF Regulations in the jurisdictions. These differences are as fundamental as

• the definition of what is an MHF – this definition can be impacted by whether the agency is provided power under the regulation to decide that a facility will NOT be classified as a MHF even though it is above the thresholds set in the national standard, as in Queensland: The definition of what is classified as an MHF may also be impacted by technical definitions such as the definition of Toxic (different in the draft WA

- regulations to the definitions in the other states). This can have a very fundamental impact such as a facility being classified as a MHF in one state (and incurring all the requirements of the regulation) but not in another state.
- the **scope** of the regulations whether the safety case must deal with health and safety issues alone, or whether it must also address environmental or land use planning issues or property issues. All these differences impact on the scope and complexity and hence cost of the safety case required to be developed.
- The **nature** of the regulations eg the Victorian regulations are more prescriptive and onerous than either the National Standard or the Queensland regulations.
- MHF legislation is administered by a range of different lead agencies eg WorkCover in Victoria, Emergency Services in Queensland, etc. These differences result in some differences in focus in implementation.
- The **definition of what is a "major incident"** differs between states, with Queensland establishing a damage bill of \$50,000 or a very short stay in hospital as thresholds which is seen as capturing many more incidents within the regime, than would occur in other jurisdictions.
- Formal coverage of security while most jurisdictions address security at MHFs in a
  generic way consistent with the National Standard, the draft NSW Regulations propose a
  much more prescribed and detailed security requirements. These security requirements
  in the NSW regulations were opposed by PACIA, and PACIA promoted that such
  security coverage should result from the detailed consideration of security controls
  through the COAG review on Hazardous Materials and should not be regulated
  through a unilateral approach in one jurisdiction.

# Inefficiencies and costs

Notwithstanding the comprehensive and lengthy NOHSC development processes, States have initiated further tripartite development processes at the jurisdictional level – often taking years for each jurisdiction.

With an MHF standard implemented in a limited number of jurisdictions, (and then inconsistently), industry in those jurisdictions has a competitive disadvantage with respect to their interstate competitors and counterparts. Workers and the public also in WA, SA, NSW and TAS continue to be denied the levels of protection the MHF National Standard requires.

# Lack of resources and expertise among regulators

One barrier to prompt and consistent declaration and administration of MHF regulations across Australia is the significant level of expertise and resources needed by the regulator to effectively administer a safety case regime often to a limited number of facilities in each jurisdiction. Typically, the jurisdictions may each have say between 10 and 50 MHFs to regulate.

It is exceedingly difficult for smaller jurisdictions to justify the expenditure to engage sufficient expert resources to effectively gather a critical mass of specialists, necessary if the jurisdiction wishes to properly administer the safety case regime and retain staff.

The impact of this issue appears to have been a key element behind the delays in implementation in many jurisdictions.

One possible model to deal with this issue can be seen in the offshore regime.

In the offshore oil and gas industry, administration of the safety case regime moved in January 2005 from a model which involved state based delivery of national legislation through state regulators - to a national regulator – the National Offshore Petroleum Safety Authority, which administers the national legislation itself.

This change in another sector, resulted from a review by an Independent Review Team which identified " the legal and administrative framework.....is complicated and insufficient to ensure appropriate, effective and cost efficient regulation of the ...industry."

Detail of the review, process through the Ministerial Council and current status may be accessed via the federal Department of Industry website - <a href="http://www.industry.gov.au/content/itrinternet/cmscontent.cfm?objectID=45588390-65BF-4956-BC4372FFC10BCEC2">http://www.industry.gov.au/content/itrinternet/cmscontent.cfm?objectID=45588390-65BF-4956-BC4372FFC10BCEC2</a>

In summary, in the offshore industry, the solution has been the creation of a skilled national regulator administering national legislation across Australia.

**Another possible model** to deal with this issue of lack of specialist resources would be for one or two state agencies to provide "consultancy" type of services to all other jurisdictions on this complex safety case regime. In this way, a sufficient pool of expertise could be accumulated and retained to provide expert services to support consistent administration of legislation across Australia.

Ideally this would involve either national legislation or national legislation which can be adopted by template in all jurisdictions – and administered through service agreements with other agencies with appropriate level of expertise and resourcing.

## Fees and charges for MHF administration

Currently PACIA is dealing with very different government fee proposals for proposed new MHF regimes in NSW and WA. PACIA has been very actively working with the two state governments and relevant Ministers in an effort to drive some parity between licensing costs in the states with existing regulations, and the two new proposed regimes.

PACIA has collected real cost information from some of our New South Wales members that have operations across other states. This information highlights the huge and uncompetitive fees that NSW is proposing to impose on industry, as compared with other jurisdictions.

PACIA Member Company	Cost over 5 years in	Cost over 5 years in VIC (1 <sup>st</sup>	Cost over 5 years in VIC	Proposed cost over 5 years - in	Comment
Company	QLD	licence)	(ROUND 2)	NSW	
Α	\$0	\$35,000		\$ 400,000	
В	\$0	\$34,187		\$350,000	
С	\$0	\$36,000	\$30,000	\$440,000	Note – only 3 materials & AQR close to 1 – yet \$440,000!
D		\$52,000		\$440,000	
E		\$52,000	\$39,000	\$400,000	Note – VIC facility is much larger & more complex than the NSW facility
F	\$0	\$52,000		\$440,000	
G		\$50,000	\$25,951	\$400,000	

Discussions are continuing with both States at present – and industry concerns have largely been resolved now as a result of further revised proposals in WA. However, industry remains extremely concerned regarding the potential impact of the proposals in NSW.

Earlier submissions are provided below to highlight the issues faced by industry.

#### Link to submissions:

http://www.pacia.org.au/ uploaditems/docs/2.paciasub nsw mhffees 13june07.pdf and

http://www.pacia.org.au/ uploaditems/docs/2.paciasub dgreform feescharges march07.pdf

#### Conclusion

PACIA considers this case study on the regulation of major hazard facilities across Australia highlights the lack of appropriate and consistent regulatory action in relation to MHFs and reveals a major deficiency in a vital regulatory requirement in half the jurisdictions. This case study highlights the inefficiencies and unnecessary costs resulting from an apparent inability to achieve consistent, efficient and uniform standards to enable industry to operate efficiently and competitively in a national and international environment.

# <u>Attachment 3 - PACIA/SIA Code of Practice into Supply Diversion into Illicit Drug</u> <u>Manufacture - A Case Study</u>

This Code of Practice was first developed by PACIA and SIA in partnership with law enforcement bodies back in 1994, and is aimed to provide a best practice guide for companies to address prevention of diversion of legitimate industrial chemicals into the illicit drug manufacture. The Code is updated regularly to reflect latest law enforcement information on trends in illicit drug manufacture, and has been most recently updated in October 2007. Compliance with the Code is voluntary; however the requirements of the Code have been legislated to varying degrees in some jurisdictions.

Chemicals deemed to be of significant interest for diversion purposes are typically submitted to PACIA by law enforcement with justification for their inclusion into the Code. Listed chemicals in the code attract controls proportionate to the level of risk for diversion and are categorised into three lists. Category I lists attract stringent industry controls, such as the requirement companies request End User Declarations from customers seeking to purchase the listed chemicals, and to subsequently forward these declarations to law enforcement in order to analyse potential diversion risks.

Cash sales are prohibited for Category I chemicals, and supply of these products is required to be delayed for 24 hours. Category II chemicals attract less stringent controls, with Category III chemicals listed for precautionary purposes only.

PACIA work closely with the Australian Crime Commission to update the Code annually, and generally support inclusions of chemicals where justified by the Commission. To support and promote the aims of the Code, PACIA takes part in National Awareness Raising programs with the ACC and other supporting law enforcement and Government Departments.

## Legislating the Code

Industry alternative frameworks have on occasion been adapted or used by others in a way not necessarily intended by the program. For example, the Illicit Drug Code has been adopted into legislation in some state jurisdictions to varying degrees, and without any consideration of costs and benefits or other regulatory requirements which also apply to the industry.

PACIA and its members have publicly supported legislating the Code, to the extent requirements are consistent across jurisdictions, are workable, and are cost effective. Unfortunately, this has not been the case

In addition, the more recent emergence of the focus on chemicals of security concern has revealed many commonalities in dealing with the potential for illegal diversion of legitimate industrial chemicals – whether for terrorist purposes or for the illegal manufacture of illicit drugs.

Unfortunately, the developments for drug precursors and chemicals of security concern are currently proceeding in parallel with very little interaction, much to the concern of the impacted industry.

Illicit drug diversion regulation is inconsistent across jurisdictions. The PACIA/SIA Illicit Drug Code of Practice prescribes a number of controls for industry to adhere to in order to assist in the prevention of illicit drug manufacture. The Code applies to substances categorised in the Code on a risk based approach, with Category 1 chemicals attracting the most stringent controls. Category II chemicals attract some controls, while Category III substances are

provided for information purposes to alert suppliers of these chemicals should an order of one or more of these substances appear suspicious.

The provisions in the Code have been picked up into some state legislation, usually in the relevant drugs Act or Regulation that prescribes possession and supply offences in relation to controlled substances, drugs, poisons and precursors.

However, the provisions of the Code and the chemicals listed in the Code have not been adopted uniformly by the States. This has created difficulties for companies in complying with inconsistent regulation, especially where companies operate and sell nationally.

A PACIA presentation on this issue was presented to the National Chemical Diversion Congress in Darwin in October 2005 and graphically displays the differences in requirements in different jurisdictions at that time. This presentation can be accessed via the link <a href="http://www.pacia.org.au/uploaditems/docs/2.precursorregs">http://www.pacia.org.au/uploaditems/docs/2.precursorregs</a> Oct05.pdf

Below is an outline of each State's relevant legislation with an overview of what, if any, provisions of the Code have been adopted and highlighting where that legislation may be inconsistent with or compete with the Code controls.

## **Australian Capital Territory**

Criminal Code Regulation Schedule 3

The Criminal Code outlines a number of offence provisions for the possession and supply of precursor chemicals. Schedule 3 lists those substances covered by the definition of 'precursors'.

This list has not been categorised by risk as in the National Code of Practice, and no associated industry controls have been adopted into the Act or regulation.

#### **New South Wales**

Drug Misuse & Trafficking Amendment Act 2006 Drug Misuse & Trafficking Regulation 2006

The NSW Regulation has adopted the sale and supply controls as found within the PACIA/SIA Code. The Regulation has scheduled the precursors into two lists on a risk based approach as in the Code.

Schedule 1 precursor controls mirror Category I controls in the Code, with a requirement for an End User Declaration is supplied by the purchaser, the purchaser is an account customer, and has furnished the supplier with photographic identity.

Schedule 2 precursor controls mirror Category II controls in the Code. Where the purchase is not an account customer, an End User Declaration must be supplied.

The chemicals listed in the Schedules are consistent with those outlined in the Code. However it is worth noting that when the NSW regulation came into force, it had included 2 additional substances into its' Schedule I that had not previously been listed in the code.

# **Northern Territory**

Misuse of Drugs Regulations Schedule 2 Reg 6

The Regulation outlines a number of offence provisions for the possession and supply of precursor chemicals. Schedule 2 lists those substances covered by regulation.

This list has not been categorised by risk as in the National Code of Practice, and no associated industry controls have been adopted into the Act or regulation.

#### Queensland

Drug Misuse Act Drug Misuse Amendment Bill 2007 Drugs Misuse Regulation 1987 –Schedule 6

Queensland currently have a draft Bill out for public comment that amends the Drugs Misuse Act 1987. The Bill introduces new requirements for industry, including the introduction of a new offence for producing and supplying precursors with intent, and the requirement for End User Declarations to be completed for supply transactions of precursor drugs or equipment.

While these amendments appear to seek consistency with the Controls outlined in the Code, the Scheduled chemicals in Schedule 6 of the Regulation are not consistent with the Code and have not been updated to reflect the Code. This means that there is no distinction between Category I or Category II chemicals, and end-user declarations must be supplied for all chemicals. Some chemicals that are listed in the Code have not been included into Schedule 6 of the Regulation.

Further, Queensland did not undertake a Regulatory Impact Statement to assess the affect these amendments may have on industry, and would have included a comparative analysis of the inconsistencies across jurisdictions and the associated difficulties and cost this causes for industry.

#### South Australia

Controlled Substances Act 1984 Controlled Substances (Prohibited Substances) Regulations 1996

The Act and Regulations outline a number of offence provisions for the possession and supply of precursor chemicals. Industry controls have not been included into the regulation.

### **Tasmania**

Misuse of Drugs Act 2001 Part 4 Controlled Precursors

The Act outlines a number of offence provisions for the possession and supply of precursor chemicals.

Precursors have not been categorised by risk as in the National Code of Practice, and no associated industry controls have been adopted into the Act or regulation.

#### Victoria

Drugs, Poisons and Controlled Substances Act 1981 Drugs, Poisons and Controlled Substances (Precursor Chemicals) Regulations 2007 The recently introduced Victorian legislation introduces offence provisions for the possession and supply of precursor chemicals. Industry controls have not been included into the regulation, and therefore the relevant substances have not been scheduled in accordance with the Code.

However, the Victorian Department of Justice has indicated that the controls as prescribed in the Code of Practice will be looked at for future inclusion into this regulation.

#### Western Australia

Misuse of Drugs Amendment Act 2004

Amendments to the Misuse of Drugs Act in 2004 introduced industry controls for prescribed chemicals, consistent with controls outlined in the Code. The Act differentiates between Category I and II substances, with provisions related to the supply and sale of those substances similar to those in the Code (i.e. the requirement for End User Declarations etc).

However, the chemicals prescribed in the relevant schedule to this Act were adopted inconsistently to the Code. Two chemicals that were categorised as Category II chemicals were adopted into the legislation as Category I substances, with the more stringent controls applied.

No cost-benefit analysis or assessment of the impact this would have on the industry was carried out. These changes presented a situation whereby a particular chemical in any one state would necessarily have to be treated differently and more stringently in Western Australia.

For one of our member companies operating on a national scale, with a national central sales centre, this caused difficulties in terms of cost for training up staff dealing with the sales of controlled substances and the additional administrative burden associated with compliance.

PACIA is currently liasing with this company in order to obtain the details of the costs associated with these regulations and the inconsistencies thereof.

### Conclusion

As evidenced above, the PACIA/SIA Code of Practice, in force since 1994 has been adopted into legislation both inconsistently and without the appropriate cost-benefit analyses taking place. There has been no appropriate consideration of the parallel requirements emerging in relation to chemicals of security concern – thus potentially making this difficult issue of illegal diversion even more complex.

The complexities in this legislation undermine industry compliance with the law. Inconsistencies of responsibilities across jurisdictions mean companies operating at a national level are met with difficulty in understanding and complying with the appropriate regulation in different areas of sale and supply.

The COAG Review of hazardous chemicals has identified a number of chemicals of security concern, at risk of diversion for illegal terror-related purposes. The Review is charged with proposing a national framework for controlling those chemicals of security concern. The consultative process the Department of Prime Minister has facilitated in order to coordinate a national approach to the possible regulation or control of such chemicals has highlighted the need for a similar and integrated approach with regulating precursor chemicals for the prevention of diversion for illicit drug manufacture.

Precursor chemicals listed in the PACIA/SIA Code have in some instances been identified as also being of security concern. Further, the same controls outlined by the Code may or may not be appropriate for security-related purposes.

The Government must assess any potential security-related regulation against regulated requirements for the prevention of illicit drug diversion. The goal and objective of both are the same – to prevent illegal diversion – and **should attract the same integrated regulatory framework that works in harmony and with no overlap so as to burden the industry with unnecessary regulation and associated cost.** 

This current situation is a major departure from the COAG principles of good regulation. PACIA has been lobbing the Federal Government to act on their commitment to promote a consistent and coordinated national approach to implementation and policy development in relation to drugs issues. We look forward to any recommendations from the Productivity Commission's work to help achieve this outcome.

# Attachment 4 - NICNAS Issues

No.	Question
1	What concerns do you have about Australia's regulatory regime for chemicals and plastics, and how substantial are they?
	The National Industrial Chemical Notification and Assessment Scheme (NICNAS) provides a national notification and assessment scheme to protect the health of the public, workers and the environment from the harmful effect of industrial chemicals. NICNAS assesses all chemicals new to Australia, and those chemicals already used (existing chemicals) on a priority basis, in response to concerns about their safety on health and environmental grounds.
	As such, the industry interaction with NICNAS represents a significant component of regulatory compliance for Australian chemical companies and therefore a significant cost to industry. Cost components include an annual registration with NICNAS, annual reporting for certain categories of chemicals, fees for notification and assessment of new chemicals to Australia, provision of data for existing chemicals identified as Priority Existing Chemicals, and reporting under the High Volume Industrial Chemicals List.
	The migration of manufacturing industry to Asia has many factors providing momentum, however two central factors for the chemical industry are the regulatory burden of operating in Australia and the cost of production inputs.
	While the subject of comparative regulatory burden is multifaceted and complex, there is no doubt that the NICNAS 100% cost recovery model, coupled with the wide net of substances under the NICNAS framework, is inconsistent with most other OECD economies. The chemical industry does not object to appropriate regulation, however the evolution of the NICNAS framework into the depth and cost of requirements of, for example, Low Regulatory Concern Chemicals - chemicals which in major sophisticated markets of Europe and the USA often do not require any notification whatsoever – is prohibitive to industry survival and growth in this country.
	Only Canada has a scheme that captures a similar breadth and depth of chemicals, however Canadian fees are significantly lower in dollars and exchanged currency and is not 100% cost recovered. On average, the Canadian regulatory cost burden to industry is estimated to be between 30 and 50% of NICNAS charges averaged over one year for new chemical applications of all classes.
	Review of new chemical notification costs in other countries shows that Australia maintains a significantly higher cost per capita than all other jurisdictions. The majority of the additional cost is being borne by Low Regulatory Concern polymers, chemicals which present minimum risk.
	(See later examples of cost comparisons between Australia and other OECD countries – Q36)
	Increasing and disproportionate costs of chemical registration: Chemical registration is an important issue for industry. NICNAS in its current form offers low value for the fees levied on industry and over regulates for low risk chemicals relative to the majority of OECD countries. The process employed is very lengthy, costly, and disproportionate to the level of risk in a significant number of assessments.

While some advances in productivity have been achieved, significant reforms have foundered and new bureaucratic devices and delays have arisen that slow the process and shift accountability. Increasingly demanding levels of data not provided elsewhere is poorly value adding and symbolic of bureaucratic pedantry. 2 What policy changes do you recommend to address your concerns, and what would be their costs and benefits? A fundamental flaw in the NICNAS model is the failure to recognise overseas notification and assessment schemes. A mechanism for such recognition is available within the ICNA Act. It is very disappointing, given the Act was proclaimed in 1989, that to date only one overseas scheme - Canada is recognised; even this is limited, with argument on occasion and differences in schedules serving to reduce the use and application of the Canadian scheme and information in Australia. The use of overseas schemes would greatly improve the effectiveness of NICNAS and deliver real benefits to industry. This leads into the very obvious question regarding the current NICNAS approach - why does a chemical that has been assessed and approved for commercial use in a regulated OECD country (overseas), have to be assessed again by NICNAS (at a significant cost to industry) before introduction into Australia? It would make better sense if the scope of NICNAS is limited to assessing chemicals new to Australia that have NOT been assessed in other regulated countries. Harmonisation should also be pursued with vigour in the following areas: Polymer exemption – manufacturers and importers of polymers of low concern in the US need only to provide a letter to the US EPA identifying the no. of polymers. The EU REACH Directive does not require registration of polymers. Data requirements (see later comment on onerous nature of NICNAS data requirements – Q.50) Use of Quantitative Structure Activity Relationships - QSAR methodology (see later comment on use of QSARs – Q.28) 8 Is the burden of regulation commensurate with the problems caused by chemicals and plastics? In the case of NICNAS, chemical registration should be proportionate to the level of risk. The rigour of data requirements (Q.50), a risk averse application of the Precautionary Principle (Q.57), the degree of internal processing (Q.51), and other factors are disproportionate to the level of risk posed by some classes of chemicals, for example polymers of low concern (PLC). The level of assessment for chemicals used in solely industrial processes, or where the risk profile is accepted as low, should be scaled back accordingly. The onerous nature of the NICNAS framework is in contrast to other Australian regulatory

models for sectoral control of chemicals, including workplace, agricultural, and

	environmental chemical control at state and Federal level, where supplier responsibility for control of exposure is set down in a <b>performance based</b> legislative framework.
14	What, if any, examples are there of outcomes of regulation that are contrary to the stated goal? For example, does the fact that the National Industrial Chemicals Notification and Assessment Scheme (NICNAS) only makes recommendations relating to risk assessment and management undermine the value of its assessments?
	NOTE regarding cited example above - a review of the NICNAS Existing Chemicals program in 2006 has recommended a strengthening of the NICNAS – States Memorandum of Understanding, to achieve better outcomes from a NICNAS assessment, as reflected in regulatory action at the state level. Industry supports this action.
	PACIA notes that currently NICNAS does not undertake any Regulatory Impact Assessment – which would indeed be essential – were NICNAS recommendations to change their status to become decisions.
	PACIA would suggest that if the NICNAS framework were proposed to change in this way, the Act would need to be changed significantly to introduce transparent decision making criteria and appeal mechanisms.
	Furthermore, any change of this nature would have significant flow on effects to other federal agencies (in particular ASCC and NDPSC) and also state and territory regulators of public health, worker health and safety and environment.
16	Have responses to major adverse outcomes led to ongoing regulatory or operational short-term responses, or have they led to structural change that has improved the efficiency and effectiveness of the regulatory system?  Do regulators make sufficient effort to measure and monitor the effectiveness of the regulations they impose?
	With regard to the second point (above), it is interesting to note that, in terms of the effectiveness of the Industrial Chemicals (Notification and Assessment) Act 1989 and Regulations 1990, there has been no comprehensive review of this framework, after eighteen years of operation. This is in contrast to, for example, state chemical control related legislation, which requires a mandatory five year review process.
19	Do you consider that the current processes for assessing existing industrial chemicals (see attachment B) represent a gap in the existing regulatory structure? If so, what new ways are there to prioritise (or categorise) chemicals and identify those chemicals that warrant risk assessment, and who (industry or government) should bear the primary responsibility, and cost, for carrying out those assessments?
	NOTE – A review of the NICNAS Existing Chemicals program in 2006 has recommended the development of a transparent process for determining priority chemicals for assessment; this will include the screening of chemicals listed in the Australian Inventory of Chemical Substances, and the development and publication of agreed scientific criteria for prioritising those chemicals which warrant assessment. This proposal represents the first comprehensive, and open process for the operation of the (Priority) Existing Chemicals program in NICNAS since the Act was declared.
28	Do regulators have sufficient access to technical information to be effective? If not, what improvements can be made in managing the flow of technical information between regulators?
	NO.

An example of restrictive practice is the limitation on the use of analogue data and Quantitative Structure Activity Relationship (QSAR) methodology.

A review in 2003 developed the Low Regulatory Concern Chemicals (LRCC) pathway, with reduced fees and a quicker assessment process for certain categories of chemicals. The LRCC self-assessment model, whereby industry would self assess low concern chemicals (chemicals which in their use offer negligible risk to workers, the public, consumers or the environment), was seen as a sensible path to reducing regulatory costs.

The LRCC reform recognised that analogue chemicals can be considered as a valid source of additional data for new chemical registration.

However, the use of analogues for this purpose has been very narrowly defined (to be plus or minus one carbon with the same functionality). It is important for NICNAS to develop understanding of analogues and the underlying principles of Quantitative Structure Activity Relationship (QSAR) modeling as used overseas by, for example, the Canadian EPA and the US EPA.

QSAR modeling recognizes the activity of functional groupings and the potency of certain chemical structures while other structures are of very low concern. QSAR modeling is useful for validating analogues that are more complex that plus and minus one carbon. The typical QSAR model is built on experience and knowledge and represents technological advancement.

NICNAS uses a plus or minus one carbon rule, whereby the acceptance of an analogue requires the analogue to be structurally identical plus or minus one carbon. This appears to be only relevant to small molecules < 100 Molecular weight (Mw), as one carbon is significant. For structures with similar structure, a > 100 Mw rule should allow 1 additional carbon for every 100Mw as a minimum. Activity should be due to similar reactive functionality.

Use of QSAR by applicants should be admissible as substitute data for toxicology and ecotoxicology.

There should be acceptance of QSAR data as viable substitute data for data gaps.

Revise use of analogues (the current +/- 1 carbon rule)

33

## Recommendation: Acceptance of QSARS as adequate data

How substantial are the barriers to entry caused by the existing regulatory system? What reforms would address these barriers while still maintaining an appropriate degree of protection for public health and the environment?

NICNAS was set up to monitor the usage of chemicals in Australia and to investigate suspect chemicals with a view to restricting or eliminating the use of such chemicals. By implication, replacing of chemicals with poor toxicological profiles with safer alternatives should be a high priority for NICNAS. However, in practice this does not occur and in fact the regulatory environment often creates a barrier to bringing safer chemicals into Australia. For example Araldite 2014 contains an adduct which due to a change in classification of a constituent raw material now requires a Toxic hazard classification. A new adduct which carries only an Irritant classification has been developed and which when used in the adhesive formulation as a direct substitute for the old adduct allows

adhesive performance that is identical to the old version of the adhesive. However, the new adduct is not listed on the AICS, therefore a full notification will be required before the safer version of the adhesive can be marketed in Australia. The quantity of the adduct to be required will be much greater than the 100kg per annum allowed under a Low Volume Permit. Therefore, in this instance, the old adhesive will remain on the market as the adhesive is specified for a variety of applications in many industries. Another PACIA member has recently completed the notification of 2 new chemicals which are components of new water-borne epoxy systems developed for protective coatings. Such technology is slowly starting to replace solvent-containing systems which present serious problems for both workers and the environment. The notifications cost the company approximately \$40000 AUD each, which means virtually no profit will be made for several years in Australia from either of the two systems. Clearly the replacement of chemicals with safer alternatives is not happening unless a high cost is paid. Even allowing for the use of a Commercial Evaluation permit to test the market a specified customers, there is the underlying issue of the company really not knowing the commercial viability of a product until the notification has been completed and the large amount of money spent.

## See Q.36 Cost barriers

See Q. 37, Q.50, Q.51 and Q.57 for Technical barriers

Do you have any evidence of excessive costs imposed by chemicals and plastics regulations? Can you estimate, however approximately, the costs imposed by these regulations on your firm or industry?

# (1) Cost of Notification under NICNAS - Comparison costs with other OECD country fees for certain classes of notification

A comparison of NICNAS fees for several categories of Notification against some OECD countries reveals that Australia's current system of chemical regulation is the most expensive system on a per capita basis in the world for fees and charges. Fees for notifying Polymers of Low Concern (PLC), standard notification, and limited notification categories are outlined below.

### NICNAS Notification fees:

Polymer of Low Concern AUD\$14,970 Limited Notification AUD\$12,539 Standard Notification AUD\$ 4,223

# Canadian scheme:

Polymer of Low Concern Can\$3,500 unlimited volume registration - lower

volume fee \$1,500

Limited schedule V Can\$3,500

#### US TSCA scheme:

All categories PMN lodged US\$2,500

PLC self certification nil

## Korean scheme:

Polymer of Low Concern US\$10 Limited US\$50 Standard US\$50

The EU does not require PLC notification (and the new EU REACH Directive does not

require registration of polymers).

NOTE - The **Limited Notification** cost (above) does not take into account typical *add on* costs to industry in a typical notification, for example:

Fee \$12,539
Fee for exempt information + \$633
Fee for variation from scheduled data + \$1184

Where a Consultant is employed to assist with the draft Assessment report to NICNAS (at \$140 p/hr, average work 32 hrs) = + \$4.500

# Total Fee can be of the order \$18,868

Additional comparison for the cost of polymer registration in several OECD countries is at **Appendix 1** which further demonstrates the increased cost burden for the Australian scheme.

Recommendation: Australian fees should not disadvantage Australian chemical Industry vs OECD average for each class of notification/reduce cost recovery to OECD best practice average

# (2) The Low Regulatory Concern Chemical Program – an added cost burden

While a review in 2003 developed the Low Regulatory Concern Chemicals pathway, with reduced fees and a quicker assessment process for certain categories of chemicals, industry has not used this pathway due to the cost of additional annual regulatory reporting burdens added after the self-assessment process is completed.

The LRCC self-assessment model, whereby industry would self assess low concern chemicals (chemicals which in their use offer negligible risk to workers, the public, consumers or the environment), was seen as a sensible path to reducing regulatory costs. Self Assessment Notification is limited to chemicals that are classified as Non hazardous, for example, Polymers of Low Concern (PLC).

The LRCC Self-Assessment (SA) was introduced and rapidly taken up by industry due to its efficiency and cost savings. However within the first year of operation an annual reporting requirement was introduced - although this requirement was not designed into the self-assessment when establishing the program.

The initial design of SA required NICNAS to briefly check each notification and completely audit 10% of SA/PLC as a compliance mechanism. Auditing started at 100% justified on the basis that the Self-assessment (SA) method needed examples to be understood by industry and NICNAS. The reduction of the audit from 100% to 10% has yet to eventuate.

The continued 100% audit and compulsory yearly reporting of self-assessments inflate the real costs of the SA/PLC to be equivalent or greater than the cost a standard PLC for a notifier. Both annual reporting and 100% audit have no justifiable reason for continued existence in risk reduction and must be removed to obtain viable efficiency.

# Costs associated with the LRCC self-assessment PLC and why this pathway is not used by industry

Using conservative figures, the impost of yearly reporting and auditing are illustrated to demonstrate why industry (notifiers) no longer uses the self-assessment system.

NICNAS fee comparison between SA/PLC Vs PLC, as at September 2007.

# Cost of Yearly Reporting:

The lower up front cost of the SA/PLC is a superficial positive only, as the additional administrative demands on industry of added reporting requirements ensures the total costs of the SA/PLC is a poor choice, relative to a standard PLC.

#### Administrative cost factors:

a) <u>Yearly Data Extraction</u> of product data for specific products containing the new chemical:

There will be at least or up to 25 or more products each containing a different percent composition of the new chemical and each has to be tracked each year for 5 years using non-routine reporting periods Aug-September.

Consider a simple case with only 3 products containing the self assessed chemical (3 products is a low estimate for paint, adhesives, lubricants, moulding plastics)

Time to extract end use product data from one business with senior management approval 3 x 0.5Hr = 1.5hr

# b) Unique and varying data calculation:

Apply the unique percentage concentration per product to produce total Kg used 0.25hr

# c) Data Entry

Enter above data in NICNAS report for each chemical 0.25 hr Total hours 1.8 x fully loaded hourly rate \$180/hr = \$324 per year Over 5 years = \$1,620

### **Cost of Audit:**

Post preparation (collation & binding) of the data file and support papers for a NICNAS application is 1 hour = \$180.

(If NICNAS have further questions that require answer an additional 1-3 hours may be added but this is ignored for this example)

# **Cost Comparison:**

Difference between SA/PLC and Standard PLC = \$1,689 (Saving)

Total reporting and audit costs = \$1,800 (Additional cost)

NICNAS is unlikely to be aware of the above costs as they have been shifted to industry, effectively cancelling the price reduction in the lower application costs for a SA/PLC.

# Further inbuilt negatives of self-assessment

Self assessment cannot be used by principals with distributorships to co-notify. Records have to be safely stored for 5 years

Recommendation: Remove all reporting requirements for SA/PLC notifications, and audit only 10% SA/PLC as initially intended.

Can you identify cases where the regulatory environment has altered the way a business would otherwise operate (for example, making a decision about where to locate a major hazard facility)?

# NICNAS Confidentiality provisions - a hidden cost of public reporting of new chemicals

Under the NICNAS framework, if a chemical name or Chemical Abstracts Number (CAS Number - a unique, globally recognised identifier for a chemical) is available in any public inventory, this will override any industry request for confidentiality in Australia.

Requests for confidentiality are considered by the NICNAS Director, who considers information provided by the applicant and draws on the advice of the Technical Advisory Group (TAG). Members of the TAG are selected so as to provide the broad expertise in commercial and public interest and may seek additional advice or information from other sources as needed

This process presents a series of COST IMPACT issues for industry:

The presence of a given chemical in a specific country may have tactical or market value to the introducer, so competitive knowledge of the chemical in a jurisdiction is also valuable competitive information.

A given chemical cannot always be directly related to a product, as it may be one of several components in a finished product.

The NICNAS Technical Advisory Group has expanded the boundaries of what is regarded as applicable data required to be collected under NICNAS for extension of confidential listing. For example, the inclusion of non hazardous chemicals (eg) polymers of low concern, where the polymer has already been assessed as non hazardous, is a misnomer. It is suggested that if the work of the TAG was constrained to lie within the scope and framework of the NICNAS Act, it would significantly reduce the amount of time notifiers spend defending chemicals already notified and assessed as Non-Hazardous.

Accordingly, this lack of assured confidentiality results in the best global technologies entering Australia at a later date than would otherwise happen.

Confidentiality of CAS and chemical name only relate to publication within the scope of the Act.

	Recommendation: Non-Hazardous chemicals to have a presumption of confidentiality.
49	Are the financial costs to applicants (and cost recovery arrangements) for pre-market notification and registration/approval of new chemicals appropriate? If not, how could they be improved?
	See earlier comparison between NICNAS Fees for notification and other OECD countries.
50	Are the information and other requirements on notifiers of new chemicals appropriate? Could they be streamlined or improved?
	PACIA members believe the information and other requirements on notifiers of new chemicals are not appropriate. In particular, there is onerous physiochemical data requirement for notified chemicals
	NICNAS notifications now routinely require a physiochemical data set with full experimental test results that support each data point. As recently as two years ago, the technical data sheets fully satisfied these data sets without formal supporting data and reference points.
	While there may be some data points for each NICNAS notification that, because of the core critical nature, may justify a level of proof, most data is not critical to the assessment. This is an example of where being global best practice is neither cost nor benefit justified.
	Australia accepts the Canadian EPA (CEPA) as an approved foreign scheme yet CEPA does not require physiochemical data to have test reports. Demand for the test reports behind the physiochemical data points provides little benefit to the assessment while spending scarce resources on data points that are many times of moderate to low importance.
	Recommendation: Remove the requirement for physiochemical data test reports except for specific and justified requests from NICNAS.
51	Are the time limits and stop-the-clock provisions for regulators adequate, and do they achieve their objectives?
	PACIA members do not believe the time limits and stop the clock provisions for NICNAS are adequate and they consider internal NICNAS processes bureaucratic.
	NICNAS consider that the assessment workflow should be governed by the concept of Submit Once Review Once (SORO). Unfortunately this process has a number of significant deficiencies as it allows the time to completion for an assessment to be slowed by NICNAS due to trivial objections or trivial lacks in data sets.
	Industry understands that NICNAS spend approximately 30% of the total assessment time at this early stage assessing data completeness and quality. To make the assessment of quality and completeness requires the file be fully read, and the data drawn together to provide a holistic picture including a gauge as to whether any data is critical, unclear, needs more support, or is inconsistent. Industry believes this model is flawed as no more than 10% of the total assessment time should be taken to complete this work.
	Incomplete data packages cannot be used as an excuse to fail to start the clock (ie) the assessment process begins its statutory assessment period, as very few chemicals more than 10 years old have comprehensive data packages.

# Recommendation: Reduce the data-screening phase. The assessment clock should start when the package is time stamped by NICNAS as being received The clock can only stop after 50% of the assessment time has elapsed without scheduled data issues and deficits being remedied. 54 Should changes be made to existing LRCC assessment and approval procedures to increase their efficiency and effectiveness, or are there alternative methods to better manage chemicals of low regulatory concern? See Recommendations in Q 36 55 What scope is there to make greater use of self-assessment processes? See Recommendations in Q 36 57 Are there institutional design factors that make regulators overly risk averse? PACIA members believe there are institutional design factors that make regulators overly risk averse. The application of the Precautionary Principle in toxicological, environmental and natural resource management areas subject to scientific uncertainty, where the outcomes are of low risk and moderate impact, and can be foreseen and managed by professional judgment, is strongly questioned. For example, the use of 100X and 1000X safety factors in environmental calculations While the 100X ecological safety factor may be a global default practice, the use of a 1000X factor is excessive and an abuse of the precautionary principle. While there are many definitions of the precautionary principle most definitions seek to ensure that an absence of scientific certainty and likelihood of potential serious or irreversible hazards that serious potential threats are NOT ignored. However it would be wrong if the uncertainty principle is used as a default position in place of scientific skill and judgment - or applied when a hazard does not in all likelihood exist. A 1000X multiplier factor is automatically used to evaluate ecotoxicology when a standard notification has no available ecotoxicology data. However, a number of ecotoxicological computer modeling packages based on expert knowledge systems can be used to provide superior insight in this area. Recommendation: Safety factors of 1000X only to be used when a fully justified and referenced argument is provided to the notifier, explaining why the 100X default value cannot be applied. What international regulatory frameworks or benchmarks should Australia seek to 63 participate in and align itself with? NICNAS - Alignment with the major trading blocks (U.S. and the EU) would greatly benefit industry, in terms of harmonisation and recognition of overseas assessment processes. See Q.64 below. 64 Are there any specific international coordination initiatives that could be progressed or further developed for the benefit of Australia? See Q.2 (repeated below)

A fundamental flaw in the NICNAS model is the failure to recognise overseas notification and assessment schemes. A mechanism for such recognition is available but to date only Canada is recognised; even this is limited, with argument on occasion and differences in schedules serving to reduce their application in Australia.

The use of overseas schemes would greatly improve the effectiveness of NICNAS and deliver real benefits to industry. This leads into the very obvious question regarding the current NICNAS approach – why does a chemical that has been assessed and approved for commercial use in a regulated OECD country (overseas), have to be assessed again by NICNAS (at a significant cost to industry) before introduction into Australia?

# Appendix 1

Data item	Australia	Ko	rea	USA	Japan				EU	Canada	Philip	pines	China	
National Inventory	AICS	KE	CI	TSCA	IS	HL	CSCL		ELINICS	DSL	PICCS			
Volume	>1 tonne	<1	>1	Unlimit	<100	>100	<1	1-10	>10	1-10	Unlimited	<1	> 1	<10
(per year)		tonne	tonne	ed	kg	kg	tonn	tonne	tonne	tonne		tonne	tonne	tonne
							е							
Govt	14418	KRW	KRW	2,500	No	No	No	No	NO	5,165	3,500	No	No	No
Application	AUD	50,00	100,0	USD						EURO	\$Cdn			
Fee		0	00											
Exempt	633 AUD	None	None	None	None	None	None	None	None	None	600	None	None	None
Information											\$Cdn			
Variation of	1140	None	None	None	None	None	None	None	None	None	NA	None	None	None
Data	AUD													
Require-														
ments(if														
needed)														
Timing														
(months)	6	6	6	4	0.10	0.25	1	18	18	10-12	3	2	12-24	6
Consolidat														
e / submit														
Govt														
Screening,														
Assess-														
ment,														
Review														

- The timeframes indicated are based on no clock stops or concerns raised by competent authorities, i.e., EPA in US
- The EU timing and costs covers all member states incl. UK. However Switzerland is not covered and a separate notification is necessary. EU tests are sufficient. We suggest to submit after the EU approval is available, because then both fee and review in Switzerland are reduced (CHF 6'500, 30 days).

# Attachment 5 – Transport of Dangerous Goods

# **Productivity Questions**

Would greater economies of scale, through merged functions or regulators (within or between jurisdictions), make compliance any more effective?

# Transport Case Study – Release of the Australian Dangerous Goods Code and the merged functions of transport regulators in Australia

PACIA believes that the legislative and regulatory system for dangerous goods transport by road is a good example of what can be achieved through merged functions of regulators.

# Implementation of the dangerous goods laws in late 1990's

The national dangerous goods transport reforms for the Australian Dangerous Goods Code (ADG6) and the Road Transport Reform (Dangerous Goods) Act and Regulations were completed by late 1997. The nationally agreed plan established by the Australian Transport Council was that each State and Territory would implement the regime together on 1 March 1998. Unfortunately, practical constraints encountered by jurisdictions did not allow for simultaneous national commencement and consequently legislative implementation was staggered across jurisdictions.

However, PACIA notes that the outcome of the process in States and Territories was extremely encouraging. By and large jurisdictions remained closely aligned to the national reforms.

A number of jurisdictions (Victoria, New South Wales and South Australia) adopted significant parts of the national package by reference, meaning that their laws were substantially word for word with those in the national package. PACIA notes the approach adopted by the remaining jurisdictions seems to be nearly if not just as effective as the other states. In essence, the other jurisdictions (Western Australia, Tasmania and Queensland) have generally adopted the broad structure and wording of the national package. To a large extent, they have repeated or 'mirrored' the words of the national package in their local laws.

The critical features of the process which achieved this very successful outcome was

- The federal government developed federal Road Transport Reform (Dangerous Goods) Act and Regulations which could be adopted by template by the jurisdictions and
- An incentive in terms of federal transport funding was provided to encourage timely adoption by template.

# **Current process: ADG7**

In February 2007, the Australian Transport Council comprising federal, state and territory transport ministers approved the adoption of the ADG7 legislative package.

This agreement encompassed approval of the ADG7 and the National Transport Commission (Model Legislation on Transport of DG by Road and Rail). The Ministerial Council agreed to

- Implementation of the ADG7 package no later than 1 January 2008 and
- The expiration of the application of the ADG6 on 31<sup>st</sup> December 2008.

The National Transport Commission (NTC) has very recently finalised and published the 7<sup>th</sup> Edition of the Australian Dangerous Goods Code (ADG7). However the accompanying model legislation to manage the safe transport of dangerous goods over land in Australia has been delayed. The new code will replace the 1998 ADG Code to ensure Australia remains in line with international standards and removes potential barriers to global trade. ADG7 combines both UN and Australian specific requirements and adopts the format, structure and definitions of UN Model Regulations.

The 7th Edition of the Australian Dangerous Goods Code [ADG 7] represents a major change in format from the 6th Edition of the Code in order to more closely align with the United Nations Model Regulations for the Transport of Dangerous Goods and therefore with the modal codes covering air and sea transport of dangerous goods.

Road and rail regulations are being aligned and harmonised with related air and maritime regulations for the transport of these substances. This will leave Australian industry well placed to move dangerous goods around Australia and the world more efficiently and safely.

PACIA and other Associations recommended that a formal mechanism be established for future UN revised Editions to be more rapidly and simply adopted into Australian legislation. This was to avoid the current issues and burden on Australian industry which result from the significant inconsistencies between Australian and international obligations.

The alignment with UN has resulted in structural changes and some content changes to the technical Code which in turn has resulted in changes to the regulations that give power to the Code. These regulations currently known as the Road Transport Reform (Dangerous Goods) Regulations 1997 and the Rail (Dangerous Goods) Rules will be issued as one set of regulations known as the *Model Subordinate Law on the Transport of Dangerous Goods by Road or Rail*.

# Implementation Issues

Despite the February 2007 decision and direction by the Ministerial Council, there is a considerable difficulty with current implementation arrangements and adoption of reforms by the jurisdictions. PACIA is concerned even if jurisdictions did implement the package in full, the legislation may not be the same as or basically consistent with the overall package. The aim of the dangerous goods reforms back in the 90's was to establish the same regulatory environment throughout Australia for the carriage of those goods by road initially by full adoption of the template concept.

However, despite all 9 transport ministers unanimously agreeing to the new reforms developed by the Commission and agreeing to implementation timeframes, PACIA is concerned with the actions of some States and Territories as to whether and how the reforms are given effect in local legislation.

PACIA has been advised that few if any states and territories will move to commence the 12 month implementation period on 1 January 2008, despite the Ministerial decision. Yet PACIA has been advised jurisdictions are planning to maintain the final end date of the transitional period to 31 December 2008 – meaning the transitional period may be reduced to 6 months or less.

PACIA has been very concerned at suggestions that the Queensland regulator may be considering making changes to some of the technical requirements in the Code – despite the extensive national development and consultative process.

PACIA fails to understand why the successful template model of ADG6 was changed – so that now we have "model" legislation – not "template" legislation which is (still) being developed to accompany ADG7. That would appear to be a very retrograde step and decision by Government.

PACIA believes having achieved a significant degree of national uniformity or consistency in the past with ADG6 and the template legislation; the challenge will be to achieve the outcome despite the disappointing changes in the process.

PACIA notes the current process lacks the financial benefits to the states and territories which were offered in the past.

PACIA is also very disappointed to note the political commitments given by Ministers in February 2007, both in terms of adoption of the Code and model legislation, and also in terms of the transitional timing and arrangements — appear to be of little real value in achieving outcomes. It appears the jurisdictions are not held accountable by the Ministerial Council for delivering on the commitments made by Ministers.

# Plans for introduction of approved emergency responders for dangerous goods transport in WA only

As an example of the approaches taken in some jurisdictions which industry finds very disappointing, PACIA has previously expressed its concern to the WA regulator regarding a policy position for introduction of approved emergency responders for dangerous goods transport in WA only. This policy position was endorsed by the Western Australian Cabinet on 17 May 2004, yet was not put forward by the WA representative into Australia's national forum for considering dangerous goods transport issues for possible inclusion in ADG7 back in 2004.

PACIA believes it would have been appropriate for the whole of ACTDG to have considered and reviewed the proposed initiative for *adoption or rejection nationally*.

From an industry perspective, such unilateral action in one state only, on a matter like transport of dangerous goods, which is vital to be addressed in a nationally uniform manner, is very disappointing and burdensome. Further it impacts on the competitiveness of business in that particular state.

# **Attachment 6 - Climate Change and Regulation**

An area of significant concern to PACIA is the increasing overlap and inconsistency of regulation in relation to climate change. It has been unfortunate that governments in Australia have been unable or unwilling to work together effectively to produce a common approach to climate change policy. The growth in regulation is further complicated when considering the inextricable link between energy use and greenhouse emissions. As such, there is significant overlap in the areas of emissions reporting, emissions trading, energy efficiency programs and environmental approvals process.

The reporting burden is the single biggest concern to the plastics and chemicals industry in relation to greenhouse and energy policy. Companies currently report to a number of voluntary and mandatory schemes, including:

- Greenhouse Challenge Plus programme;
- Energy Efficiency Opportunities (EEO) programme;
- Requirements under the State and Territory Government Approvals processes;
- State and Territory Government Greenhouse Gas Inventories, such as the Western Australian Greenhouse Gas Inventory (WAGGI); and
- State and Territory Greenhouse, Energy and Water Schemes, such as the Victorian Government Environment and Resource Efficiency Plans (EREP).

Also, both the Australian Government and the State and Territory Governments (through their Inter-jurisdictional Working Group) are proposing to implement a National Emissions Trading Scheme. Each has required (and will continue into the foreseeable future) considerable input by company representatives and the PACIA Secretariat. We have also been required to respond to competing proposals for the establishment of a national reporting scheme through either the National Pollutant Inventory (NPI) or a new purpose built tool.

The reporting cost burden is exacerbated by the requirements of each piece of legislation to address slightly different aspects: some target greenhouse gas production, some focus on energy use while others focus exclusively on carbon, all of which require a different set of measurements or calculations, in addition to the time that is spent on attending meetings and consultation sessions.

Often regulators are inflexible about altering details. For example, it assists industry to have alignment on reporting periods (the option to report against a calendar year or financial year), but some regulators will not allow flexibility in this regard. The EEO programme is to be congratulated for allowing companies to choose either reporting period depending on what is the most suitable for them. However, it remains the case this it is currently possible for companies to have different reporting periods for Greenhouse Challenge, EEO, NPI and EPA reporting, for the same or similar data.

The EEO legislation requires industry to implement projects where the payback is 4 years or less, whereas the Victorian EREP legislation requires a payback of 3 years or less. In Victoria in 2007, the requirement to undertake an assessment of water savings opportunities (WaterMAP) was introduced within a month of the EREP legislation which also requires industry to assess water saving opportunities.

It should also be noted that most companies are invited to provide input to numerous surveys throughout the year such as the ABARE fuel and energy study. Estimates for these surveys for an indicative medium sized company stands at around nine or so surveys per year each placing an additional burden on company resources.

# Case Study

A PACIA member company estimates that the cost of dealing with duplicate legislation would be \$30,000 per site each year. The cost is comprised mostly of additional labour required to duplicate reporting etc, but there is also an additional cost that is caused by having to prepare and conduct different inductions and training programs in each state due to the need to cater for local differences in legislation.

# PACIA Response

PACIA members are committed to addressing climate change through their own actions inside the "ring fence" and also through stewardship arrangements with its customers and suppliers. PACIA supports:

- National leadership and policy on climate change, including national consistency wherever practicable;
- A broad suite of measures to address climate change;
- The introduction of an appropriately designed emissions trading regime that recognises the key challenges facing trade exposed emissions intensive industry; and
- The mandatory reporting of greenhouse emissions.

While PACIA welcomes the intent of the recent legislation introduced into Federal Parliament aimed at streamlining energy and emissions reporting, it will be critical that the *intent is delivered upon*. That is wherever practicable all Australian Government and State and Territory Government programs are streamlined into a single reporting tool, again emphasising that under current arrangements companies operating across several jurisdictions are required to report up to eight different schemes each subtly different in the information they require or the methodology used to underpin them.

PACIA would also hope that the proposal for an Emissions Trading Scheme by the Australian Government would build on the work of the State and Territory governments. It would be particularly unfortunately if both systems were to exist into the future. Further, it is important that wherever possible existing mechanisms and regulatory and compliance models were used to implement the trading scheme rather than "re-inventing the wheel".

PACIA would also see significant value in the all levels of government seeking to align regulatory approvals processes and that ministerial approval conditions would be applied equally across the jurisdictions.

## Attachment 7 - NPI

## **Productivity Questions**

Q28. What are the best ways to enhance public understanding of the potential risks from chemicals and plastics (such as improved education, training and awareness-raising activities, and generation and dissemination initiatives)? Is the National Pollutant Inventory a useful and cost effective tool?

The chemical industry, while supporting in principle the NPI, has been extremely concerned and opposed the new inclusion of transfers (on and off site) in the reporting requirements on the grounds that it will incur significant costs to industry and government and will not contribute meaningful information to enhance public understanding of the potential risks from chemicals and plastics (such as improved education, training and awareness-raising activities, and generation and dissemination initiatives).

- PACIA believes if transfers are to be included, then only those transfers that end up directly in the environment – air, land or water (e.g.: direct to land-fills, rivers, sea) should be reported. In many cases, data is already being gathered for reporting to various jurisdictions, however, additional costs for analyses would most likely be needed.
- PACIA has opposed the inclusion of transfers in the NPI because they represent increased administrative burden and cost to industry without any net-positive environmental benefit or further enhancement to public understanding of the potential risks from chemicals and plastics (such as improved education, training and awareness-raising activities, and generation and dissemination initiatives).
- PACIA understands that the requirement to report is designed in part to alert businesses and the community to the environmental impacts industry operations have on the environment, thereby encouraging industry to minimise negative impacts and potentially divert wastes to alternative, value-adding production streams.
- However, it still remains unclear to PACIA how the reporting of substances destined for landfill, sewerage, tailings dams, underground injection, or other long-term waste storage or treatment facility will actually result in a net environmental improvement. The companies that will be affected by this measure are already acutely aware of the substances they are emitting, the destinations of these, the effects of these on the environment, and any alternatives available to them.

PACIA notes transfers are neither pollution nor emissions to the environment unless they are emitted to air, land or water. Substances from the reporting list which are included in the transfers (mandatory or voluntary) do not enter the environment. If a portion of the substance does in fact eventually enter the environment, that emission is reported by the facility responsible for the release.

PACIA notes in the Australian Government's response to the report "Rethinking Regulation –
Report of the Taskforce on Reducing Regulatory burdens on Business", the commitment to
reduce variation from international standards and for regulators to align Australian
approaches with international standards.

The basis for inclusion of transfers has also referred to Australia's international commitments. PACIA notes that a number of countries have Pollutant Release and Transfer Registers (PRTR). However, only a few countries have these registers and only one country (USA), includes external transfers plus estimates of on-site treatment, recycling and energy recovery. Canada and the UK include external transfers only, and the remaining countries do

not include transfers. Further, the UK obtains the information only as summary data for classes of wastes.

PACIA believes the proposal for transfer data in the NEPM is far more detailed and costly than those in any other country with the possible exception of the USA. Given the size of our industry this is not an economically sustainable reporting requirement to enhance public understanding of the potential risks from chemicals and plastics (such as improved education, training and awareness-raising activities, and generation and dissemination initiatives).

• Increased public scrutiny will neither enhance companies' awareness nor their ability to divert the emissions to a non-transfer destination. In fact, PACIA is concerned that companies reporting mandatory transfers may have to divert resources from environmental management to public relations efforts in order to explain to stakeholders what is effectively not new information about how they deal with certain substances.

# Case study (Refer to Appendix 1)

To help determine the financial impacts of the amended variation, the Department of the Environment and Water Resources commissioned EECO Pty Ltd to investigate and report on the financial impact associated with transfer reporting under the new requirements.

This report investigates the costs of reporting transfers to the National Pollutant Inventory (NPI). The obligation to report transfers is part of a variation to the current NPI NEPM requirements. A case study on the chemical industry was completed very late in the review stage to explore the tasks necessary for industry to report transfers and their associated costs.

For the industrial estate, the total cost for transfer reporting in the first year is \$26,300 and includes the set-up costs plus ongoing costs.

The total cost of transfer reporting in the second year (and thereafter) is \$12,200. The approximate cost of ongoing transfer reporting per facility is \$2,440.

The estimates represent the additional costs of mandatory transfer reporting. In some cases, a facility may determine that they do not need to report transfers, but they nonetheless incur costs in learning the transfer requirements and determining the facility's reporting obligations. Ongoing costs beyond the first year are lower as the reporting obligations are known and the need for waste characterisation (including chemical analysis) is reduced or eliminated.

To properly self-assess the need to report transfers, a facility needs to:

- review regulatory requirements,
- review the NPI substances for which they exceed the reporting threshold,
- identify the waste streams that may contain these NPI substances,
- review existing data including waste stream analyses, and
- identify any data gaps and if required, obtain the required data.

Where significant data gaps exist, laboratory analyses may be required. Analytical costs are mostly incurred in the first year as transfer factors should be developed for subsequent years. Ongoing analyses are only needed for highly variable waste streams or to modify transfer factors to account for significant process changes.

Appendix 1: Table 1.1 Case study cost summary

First year only*	Com- ponent Hourly	Staff 1	Staff 2	Staff 3	Staff 3	Analyses	Subtotal	
Task	rate	200	150	100	50			
Understanding							\$	
regulatory reqs		2	8	2	1	\$ -	1,850	
Determining								
reporting							\$	
obligations		0	19	6	0	\$ -	3,450	
Performing calcs,								
measurements &							\$	
estimates		0	30	11	1	\$ 1,500	7,150	
Reporting transfers							\$	
Reporting transfers		2	7	1	2	\$ -	1,650	
hours	·	4	64	20	4			
			\$	\$				
		\$	9,600.	2,000.	\$	\$		
Total		800.00	00	00	200.00	1,500.00	\$14,100.00	

\*excludes ongoing

costs

92 total hrs

Every year Compo		Staff 2	Staff 3	Staff 3	Analyses	Subtotal	
Hourly rate →	\$ 200	\$ 150	\$ 100	\$ 50			
	1	4	1	0	0	\$ 900	
						\$	
	0	10	6	0	0	2,100	
						\$	
	0	28	12	1	1500	6,950	
	2	10	3	1	0	\$ 2,250	
	3	52	22	2			
		\$	\$				
	\$	7,800.	2,200.	\$	\$		
	600.00	00	00	100.00	1,500.00	\$12,200.00	
`							
	nent → Hourly	nent → Staff 1 Hourly \$ 200  1  0  2  3  \$	nent → Hourly rate →       Staff 1 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	nent → Hourly rate →       Staff 1 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	nent → Hourly rate →         Staff 1 \$ \$ \$ \$ \$ \$ \$ \$ \$           1 4 1 0           0 10 6 0           2 10 3 1           2 10 3 1           3 52 22 2           \$ 7,800. 2,200. \$	nent → Hourly rate →         Staff 1	

Department of the Environment and Water Resources commissioned EECO Pty Ltd to investigate and report on the financial impact associated with transfer reporting under the new requirements.

# Attachment 8 - Water Treatment Industry Case Study

# **Productivity Questions**

- 12. Do you consider that the current regulatory regime is effective in addressing issues in relation to: public health and safety (cooling towers)
- 34. How substantial are the barriers to entry caused by the existing regulatory system? What reforms would address these barriers while still maintaining an appropriate degree of protection for public health and the environment?
- 35. Are there specific areas of overlap in the regulations that are burdensome and inefficient?
- 36. Are you able to provide any estimates of the costs caused by gaps, overlaps or inconsistencies in the regulatory framework?
- 38. Can you identify cases where the regulatory environment has altered the way a business would otherwise operate?
- 39. Are you able to articulate alternative regulations that would meet the same objectives, but that would reduce or eliminate the costs you have identified?
- 40. Where are the greatest inconsistencies in regulation: between the Australian government and the states and territories, between the states and territories or within jurisdictions, that warrants reform?

# **Water Treatment Industry Case Study**

# Purpose of the industry:

- Legionella control
- Corrosion/scaling control
- Process water management
- Water use minimisation

#### Diverse range of applications and services to industries such as:

 Commercial, Industrial, Energy, Mining, Automotive, Paper, Petrochemical, Manufacturing, Food & Beverage, Chemical and Plastics

## **Diversity of organisations**

- Multi-national to one man operations
- Overall estimate of 750 to 1,000 estimated employees
- Estimated \$200M to \$300M in revenue

PACIA believes it is essential to have a uniform regulatory regime with the ultimate objective of:

- Minimising potential occupational and public health risks from exposure to Legionella bacteria arising from cooling tower systems.
- Provide guidance to water treatment service providers (WTSPs) and their clients on maintaining the waters of cooling tower systems, in accordance with a system's risk, relevant legislation, standards and water conservation.

- Establish an accepted minimum level 'best practice' standard for WTSPs, to assist in achieving the above objectives.
- Provide an acceptable self-regulating mechanism for improving the industry's collective performance and accountability.

PACIA notes the current regulatory regime is effective in some states but ineffective or non-existent in other states.

There is no nationally consistent approach at this point in time. A cooling tower in one state requires three times the amount of service that an identical tower would in another jurisdiction; yet this does not necessarily make it any safer to the public. It must be noted that even the highest regulated states such as Victoria and New South Wales have not considered the changes to technology in cooling tower monitoring equipment.

The barriers to entry are substantial as a result of the significant regulatory differences between States. The regulatory differences require companies to manage additional overheads in the form of:

- Training differences between states
- Service reporting differences between states
- Service and administration procedural differences between states
- IT development between states

Currently most water treatment companies have to operate quite differently in some states (for example NSW and Queensland), this is a result of the operational differences. PACIA believes if the regulatory systems were uniform then companies would be able to operate on a more consistent basis throughout the country. As a result, organisations would be more efficient and more effective.

Reforms that introduced a higher degree of regulatory commonality between States would address these barriers while maintaining an appropriate degree of protection for public health and the environment. In fact, the degree of protection would improve because under the current regime some states are not regulated. Furthermore, it is inevitable that inconsistency undermines regulatory compliance and companies struggle to deal with the different requirements.

In some cases where there are no barriers, PACIA believes it is to the detriment of industry as it causes large numbers of operators working in an environment which is not equal to all. PACIA believes this is not responsible and adds to the significant risk to public health. We believe the regulatory requirements for protection of public health need to be high; they also need to be consistent.

Looking at a state by state comparison, the regulations vary greatly; PACIA notes the greatest differences are in service and reporting requirements.

# **State Analysis – Operational Differences**

# Water:

• Water quality varies but knowledge-base is the same

# Industries:

• Some industries more prominent in some states (for example Mining in WA)

State Regulations - Differences

Philosophy Prevention or Resolution	Governing bodies Health Dept or OHS	Consequences of infringement
Registration Local or centralised	Prescriptive or permissive Mandate or recommend	Who is Responsible? Owner/Manager  Whether independent audits are undertaken or coordinated by a central body or by council
Frequency of servicing – records kept	Frequency of cleaning - Cleaning procedures	Bacteria and Legionella sampling Random sampling or response to issues
Response to high bacteria Whether positive Legionella results must be referred to an authority	high HCC or Legionella	Risk management requirements

# State Regulations – Example

# Response to positive Legionella:

	Action	Mandatory or Recommend	Response Time
NSW	AS3666: Disinfect and resample	Recommend	n/a
QLD	AS3666: Disinfect and resample	Recommend	n/a
SA	n/a	n/a	n/a
Vic	Disinfection, review, resample	Mandatory	24 hours
WA	n/a	n/a	n/a

PACIA member companies find estimating costs to be always difficult. Costs to run a service business in Victoria are obviously higher than in South Australia or Western Australia

Industry requirements which are taken into account include costs to industry over and above those which must be met due to compliance increased due to running parallel systems such as:

- IT
- Training
- Administration and services procedures
- Procedures
- Systems
- Industry body training programs
- Industry body accreditation programs

# Example 1: Company A

- National Company
- Australian owned
- Over 100 employees
- Water services and equipment
- 50% Commercial, 50% Industrial

#### Example 2: Company B

- International Company
- Internationally owned
- Over 100 employees
- Water services and equipment

Both company A and B service clients in all state jurisdictions - many sites weekly depending on state requirements. Such activity adds to administration costs, upgrading computer systems to cope with the scheduling etc. In South East Queensland company B is not only a water treatment specialist but are also required to act as water auditors – such costs are absorbed into the business. The full cost of servicing and especially the administration component is not completely cost recovered from customers. Training technical employees

who work across various state borders (on regulatory requirements – codes of practice and standards) is at times difficult as they need to be aware of different legislation.

PACIA notes the availability of use of an Australian Standard for the Water Treatment Industry (AS3666). We believe the greatest inconsistency lies in the types of legislation in the various states and territories, although all quite prescriptive, some states have taken a more 'Risk Management Plan' approach, such as Victoria and Queensland. Other states use a more prescriptive approach - for example in New South Wales and South Australia. A term commonly used by various state requirements is 'competent person' and this at times has caused confusion as to the definition given in particular jurisdictions.

Some issues which appear throughout the industry are for example when national customers based in one state request all their towers treated based on the Victorian system. Therefore in NSW, the tower is treated under the state regulations and also by the more risk based regulations such in Victoria.

The increased costs would be in the order of \$100,000 to \$150,000 across all States of Australia.

The estimated increased costs to Company B would be in the order of the vicinity of \$250,000 annually.

PACIA believes a national approach is required.

PACIA strongly recommends more emphasis must be placed on new issues and monitoring approaches. The new issues include increasing the number of cycles of concentration and the use of recycled water in cooling towers to save water, requiring different approaches be taken to current programs.

The introduction of more sophisticated control and monitoring equipment would allow for online 24/7 monitoring with sophistication not seen before. Such areas need to be taken into account and therefore reduce the service component of a cooling tower program as equipment and chemical status is available.

Uniform approach to Water Treatment Industry will result in

- Reduction in costs to industry
- Improvement in training standards
- Improvement in service standards
- Realisation of national accreditation:
  - technicians and company
- Development of national career path for industry employees

# **Attachment 9 - Security Sensitive Ammonium Nitrate (SSAN)**

This case study is based on information which was gathered together in September 2006 at the request of the Department of Prime Minister and Cabinet to help them to understand better the impact on industry of the differences between the jurisdictions. It has been updated a little from the letter to Dr Rob Floyd, dated 15 September 2006.

The chemical industry is committed to achieving enhanced levels of security and control over all aspects of the chemical supply chain to minimise the risk of legitimate industrial products being diverted for illicit use. PACIA and its member companies have a long history of working very closely with both federal and state agencies to achieve enhanced security controls. This work has historically focused on areas of chemical weapon precursors, chemical precursors, illicit drug precursors, explosives and in recent years, security sensitive ammonium nitrate (SSAN).

PACIA has been very pleased over the last four years to proactively develop specific industry guidance on security issues. In 2003, PACIA developed the first Edition of its Responsible Care Site and Supply Chain Security Guidance to assist the industry. PACIA is currently updating and reviewing the document to publish the fourth Edition.

In addition, prior to the June 2004 COAG decisions regarding SSAN, PACIA developed a draft industry Code of Practice for Secure Distribution of Security Sensitive Ammonium Nitrate which subsequently was largely adopted into the national SSAN Transport Guidelines.

The three policy aims of the COAG Principles on SSAN, set out below, were strongly supported by industry:

- A nationally-consistent, effective and integrated approach to control access to security sensitive ammonium nitrate to those with legitimate need
- To ensure accountability at all stages of the ammonium nitrate supply chain, in order to address security and safety concerns
- To establish a framework for control which may be applicable for other materials of security concern

Sadly, those policy aims were not met in the regulation and administration of SSAN.

From an industry perspective, there have been a number of issues:

There have been delays in making this priority security legislation - Only two states (Queensland and Northern Territory) met the 1 November 2004 deadline set by COAG. All other States then worked to a revised 1 July 2005 target for making regulations; however none achieved that revised target. One state – Western Australia, still has not made legislation. Those delays and inconsistent commencement dates, impact on national companies greatly, and clearly don't achieve the security outcomes in the timeframe sought by COAG and the industry.

# There are significant inconsistencies between the states, e.g.: Terminology

- Victoria regulates SSAN under the Dangerous Goods Act as a Class 5.1 Dangerous Goods called a "High Consequence Dangerous Goods". This terminology is used by the United Nations Sub Committee of Experts, but has quite a different interpretation.
- Queensland declared SSAN to be a Class 5.1 "Explosive" a uniquely Queensland terminology, which inappropriately distorts perception of SSAN products.

- New South Wales developed new Explosive Regulations which cover SSAN as an "explosive precursor" or "security sensitive dangerous substance".
- South Australia refers to SSAN as a "Security Sensitive Substance", and Tasmania refers to it as "Security Sensitive Dangerous Substance".
- Western Australia refers to it as a "Security Risk Substance".

This does not support national consistency in approach.

# **Licence Requirements**

 Details of the different requirements / costs and processes by State is attached at Attachment 1

# Background Checking

• States are dealing with background checking differently – the role of the regulator differs, disclosure rules differ. In particular, the process in QLD, where the onus is on the employer (not the regulator as in all other states) to make the decision on people with marginal security assessment, proves very difficult. This also means other states like Victoria, will mutually recognize security clearances in all other states, except for Queensland, because of the issues with the QLD process.

#### Mutual Recognition

- Some states, e.g. South Australia, will not mutually recognize transport licences issued in other states, despite considerable industry comment on the adverse impact and cost burden on industry resulting from that position. In addition, SA is the only state which requires an import licence when bringing SSAN in from another state (as distinct from another country). Furthermore, industry is required to give seven days notice and obtain permits for movement of SSAN to and from other States. This would appear to be in contravention of the spirit, if not the letter of Section 92 of the Constitution.
- On the other hand, other states like Victoria are quite explicit in their legislation in mutually recognizing licences and security clearances granted in other jurisdictions.
- Operations under State management but Commonwealth Security regulations (ie ISPS compliant ports) require different licences again (MSIC Cards), which are not recognized by any jurisdiction apart from Victoria.
- The most burdensome aspect of the SSAN Regulatory framework is the lack of Mutual Recognition between jurisdictions for such essential operating items as licenses (people and vehicles) security plans, security clearances and similar matters. The major supplies of SSAN come from factories located in 3 States (NSW, Qld and WA) topped up by small quantities of imports. Intrastate movements are not problematic but large quantities of interstate movements are necessary to supply customers in jurisdictions lacking manufacturing facilities inside their borders and to redress supply/demand imbalances which occur regularly between the east and west of Australia. Each such trip has to be carried out with separate security plans for each jurisdiction. Costs are not separately calculated but are absorbed into both freight rates and the number of additional people employed solely for compliance work.

#### Different approaches to control

- A summary of major problems for industry by jurisdiction is attached at Attachment 2.
- One state, namely Tasmania, has banned use of SSAN for agricultural purposes despite the COAG decision to the contrary.
- Queensland is currently considering declaring the fertilizer, Calcium Ammonium Nitrate – which falls within the definition of SSAN, but is not classified as a dangerous goods internationally – to be a "dangerous goods". This would have huge cost impact on the industry, and would trigger very different storage and transport safety requirements. Industry has carried out and provided test results to the regulator to confirm the international classification as a non dangerous goods – yet this issue

remains unresolved. PACIA notes that the National Guidance Notes issued by the COAG National Working Group, which was set up to prepare nationally consistent guidance on SSAN repeatedly make statements such as "SSAN includes calcium ammonium nitrate which is not classified as a dangerous good". This is a very significant issue for the affected industry.

- South Australia has added UN 2426 to the list of materials fitting the definition of SSAN – contrary to the COAG definition
- The lack of a national licensing system is a major impediment to the smooth running of the industry with no fewer than nine separate jurisdictions each with their own licences which largely deny recognition of any other licences.
- The demands in some States for a recognized non-explosive material to be stored and handled as an "explosive" do not reflect the scientific reality of SSANs.

Issues Arising from the complexity of this licence structure:

- The differences in licence costs, coverage and duration in the various jurisdictions; differences which considerably complicate the redeployment of people and machines between States in an industry which demands frequent and rapid movements of this type.
- 2. The significant differences in what should be at least one common factor the cost of an ASIO check.
- 3. A Queensland authorisation (licence) is not accepted in other jurisdictions owing to the regulatory reluctance to issue a portable formal credential (eg a photo ID card) and a regulatory regime which requires employers<sup>1</sup> to decide if an employee is a fit and proper person to hold an SSAN credential.
- 4. Regulators consider State based security clearances are essential to ensure the criminal checks are conducted in conformity with existing laws in that jurisdiction relating to spent convictions and like matters.
- 5. If a person moves permanently interstate a complete security assessment in the new state is required *including* a repeat ASIO check.
- 6. The licence status of a person temporarily located interstate (eg for holiday relief) is unclear and is greatly complicated by the different licensing structures detailed in Table 1. Note that for a person moving in or out of Queensland even a short term relocation requires a new application for the reasons given in point (3) above.
- 7. Interstate relocations requiring re-licensing attract the full fee for the new licence but receive no refund for the unexpired portion of the previous licence. Costs are significant but almost impossible to quantify.
- 8. Industry staff are very mobile it is estimated that 10-15% of operational employees spend some time every year living interstate to meet business demands of some type eg projects, holiday/sickness relief, business support etc.

Industry has not received adequate guidance on assessment and ranking of security risks and has concerns regarding the possibility of storage risks being overstated. Some jurisdictions have imposed *consequence* determined separation distances for SSANs instead of risk based, thus applying explosives separation distances to non explosives. Industry would welcome the opportunity to work jointly with government, as has occurred with the Department of Homeland Security in the United States for example, to develop security vulnerability assessment methodology and training.

# Regulatory complexity within jurisdictions

A further problem is regulatory overlaps within a jurisdiction. eg:

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<sup>&</sup>lt;sup>1</sup> In other jurisdictions the regulator makes these decisions.

- differing interpretations of which regulator takes precedence when an MHF also manufactures or stores SSAN – the MHF regulator or the SSAN regulator – that differs in different jurisdictions
- split responsibilities for transport safety and security licence issue causing the situation in NSW where licenses are issued by any one of combination of DPI, WorkCover and DECC

# This has been a very inefficient process for all stakeholders.

- Clearly the overall process involving separate public comment processes in each jurisdiction, and different regulatory and implementation requirements, has caused significant cost, time and resources burden on industry and government.
- It must be noted from a Government perspective, this process is taking significant resources in each jurisdiction, for just **one** security sensitive family of chemicals and it is not at all clear that the security outcomes sought are being achieved. Not only is the current legislation inconsistent between states, but approaches to education and enforcement are also different. The mechanisms for effectively detecting any diversion would appear essential to feed into a national system in order to identify patterns etc.

# SSAN REGULATIONS - STATE DIFFERENCES

# REGULATION FEATURE: LICENCE

STATE	DETAILS
NSW	Photo licenses agreed; have not yet become available. Security
	assessments carried out by police and ASIO only.
	Cost of simplest licence \$150
	Unsupervised Handling Licence (UHL) available
	Interstate licences recognized for drivers in transit; change of domicile to
	NSW requires getting new licence from scratch including ASIO
	clearance.
	Not valid for ISPS ports
	Max. term 5 years
VIC	Similar to NSW
	Explicit mutual recognition
	Maximum fee \$80
	Maximum term 5 years
SA	No acceptance of interstate licences at all
	Identification requirements exceed passport requirements
	Security checks require consent to waiving rights under Spent
	Convictions Act, fingerprinting and in some cases DNA samples
	Maximum term 3 years
	Director has right to cancel OR renew expired licence.
QLD	Only shotfirer's and "high level" (eg corporate) licences are issued
	Onus is on the employer (not the regulator as in all other states) to make
	decision on people with marginal security assessment. This means other
	states like Victoria, will mutually recognize security clearances in all other
	states, except for Queensland.
	All other security cleared people to be documented on security plans but
	are only identified by production of driver's licence. The QLD Regulator
	has been formally requested by industry to revisit his decision not to
)A/A / I /	issue photo-ID licences.
WA (draft	A person's security status is proposed to be established with a personal
Regulations)	security card – a photo-ID type. This does not by itself constitute a
	licence but it is a pre-requisite to being granted an "authority" by a
	licence holder to handle SSAN. Security card has 5 year duration.
	A licence issued under that security card has a maximum 3 year duration
	— timing differences are expected to create difficulties.
TAS	A person handling SSDS must have a "permit" and be nominated on a
170	Security Plan. The permit may not be issued without security clearance
	and is "employer specific" ie should a person change employers the
	Permit procedure needs to be performed a second time. Permits are
	issued and withdrawn by the Commissioner of Police.
	In Tasmania an"Authorised person" is a Government employee
	authorized to enforce the SSDS Regulations. In all other jurisdictions
	"authorized person" refers to a security cleared person actually <b>working</b>
	with SSDS.
L	0000.

# Specific costing of licensing in each state.

Most states have similar fees, although QLD is a little higher. NSW on the other hand, is noticeably more expensive, with licences costing in the thousands. The ASIO checks (highlighted in RED, ITALICS) are also comparable, except for NSW, which is double the other states (\$60-\$70 versus \$150).

Another difference is the number of licences required in each state. There is no consistent approach as to how SSAN is licenced. For example, in VIC, use, sell, import, export, manufacture, etc is all contained on the **one** licence. In QLD, each licence is separate.

licence. In QLD, each licence is separate.	1				
Type of Licence	NSW	SA	TAS	VIC	QLD
Application for a licence to Access High Consequence Dangerous Goods (Store, Use, Sell, Transport, Import, Export, Manufacture)				\$80	
Identification Form - Natural Person				\$0	
Application to conduct National Police Check and ASIO Security Assessment				\$59	
Notification of Dangerous Goods Storage and Handling				\$0	
Identification Form - Non Individual				\$0	
Explosives Licence (Licence to Make Explosives with MMU) individual for 5 years				\$250	
Bulk Vehicle Licence (individual) 3 years				\$30	
Licence to Manufacture (covers all trucks) 1 year	\$2,500				
Transport Explosives (covers all trucks) 1 year	\$2,000				
Import Explosives	\$2,000				
Supply Explosives	\$750				
ASIO Check	\$150				
Licence to Store - Company (5 years)	\$250				
Notification of Dangerous Goods on Premises (1 yr)	\$100				
Manufacture Explosives (5 years)	\$2,350				
Licence to Store Explosives (5 years)					\$1,438
Licence to Manufacture (5 years)					\$1,478
Licence to Import (5 years)					\$1,167
Licence to Sell (5 years)					\$289
Licence to Export (5 years)					\$1,167
Licence to Manufacture (MMU) 1 year					\$136
Licence to Use (5 years)					\$205
ASIO Check - Authorised Person					\$78
Security Clearance		\$63			
Bulk Vehicle Dangerous Goods (1 year)		\$98			
Mix and Use Ammonium Nitrate (1 year)		\$105			
Permit to Purchase, Sell, Supply, Manufacture, Use, Dispose, Import, Export, Store, Carry (3 years)		\$45			
Security Sensitive Dangerous Substances Permit			\$157		
Licence to Keep Dangerous Goods			varies		
Bulk Vehicle Licence for the Transporting of Dangerous Goods (3 years)			\$88		
Security Check			\$66		
Manufacturers Licence					

#### MAJOR PROBLEMS BY JURISDICTION

#### 1. QUEENSLAND

- a) Excessive focus on alleged explosive behaviour of SSAN materials which are internationally recognized as "non explosive". There is a focus on perceived catastrophic consequences of an extremely improbable event ie a group of skilled and well equipped terrorists deciding to destroy a large SSAN inventory in spite of:
  - security precautions at the site
  - the technical uncertainty which exists about the percentage of material which would react and the power of such reaction
  - the relative political attractiveness of damaging an otherwise unattractive industrial target.
- b) Conversely transport security requirements are quite modest
- c) Supplier's obligations to verify identities and on-the-spot security statuses of various parties in the supply chain are handicapped by regulator's use of paper authorizations and security plans, thus avoiding the use of official photo ID cards or similar
- d) Declaration of the fertilizer Calcium ammonium nitrate as an "explosive" in Queensland despite its well documented behaviour both as a non-explosive and a non dangerous goods.
- e) QLD is the only state to require monthly reporting of sales from all levels of the distribution chain, creating issues with cross border sales and importation
- f) Complex State legislative structure ie
  - Regulation of Explosives, SSAN and mines is with Dept of Natural Resources, Mines and Water
  - Transport safety (but not security) is with Dept of Transport
  - Workplace Health and Safety regulates OHS
  - Dept of Emergency Services regulates DG and MHF
  - Local government licences Class 3 DGs

#### 2. NEW SOUTH WALES

- a) Regulator (WorkCover) is high cost and resource limited; and hence struggles to achieve own deadlines and forced to issue periodic exemptions from those deadlines. A further 3 month delay in some issuing some licences was gazetted very recently.
- b) Complex State legislative structure ie
  - Regulation inside a mine boundary is with Department of Primary Industry (DPI)
  - Transport safety (but not security) is regulated by the Department of Environment and Conservation
  - WorkCover regulates the remainder

#### 3. VICTORIA

No major state specific issues apart from inappropriate use of term "HCDG", given the earlier use of the term by the United Nations.

#### 4. TASMANIA

Lack of interchangeability of security credentials to a different employer within the same state.

# 5. SOUTH AUSTRALIA

- a) Requirements for identification, security clearances, DNA samples, Spent Convictions Act waiver exceed requirements in other jurisdictions *including passport regulations*.
- b) State has similar focus to QLD on alleged explosive behaviour of SSAN materials which are internationally recognized as *non-explosive* materials.
- c) Requirement to give 7 days' notice and obtain permits for movement of SSAN to and from other States contravenes the spirit if not the letter of the Australian Constitution.
- d) State requires annual returns of SSAN quantities handled within the State.
- e) In addition to SSAN used within the State, item (c) above requires SSAN in transit though the State in locked containers on rail to be subjected to requirements for permits and 7 days notice.

# 6. <u>WESTERN AUSTRALIA (draft Regulations)</u>

- a) A similar focus to QLD and SA on alleged explosive behaviour of SSAN materials which are internationally recognized as non explosive materials. This is resulting in existing facilities for SSAN being declared as non-conforming on safety grounds.
- b) Licence system proposed to operate in yet another way which requires security cleared personnel to carry a security card and to have a specific permit from their licenced employer to carry out a particular task on licenced SSAN premises.

#### **KEY ISSUES AFFECTING ALL JURISDICTIONS**

- COAG first policy aim requiring a "nationally consistent, effective and integrated approach" has demonstrably *not* been implemented by the jurisdictions. Similarly COAG Principle No 15 requiring the upgrading where necessary of explosives regulations to SSAN standards has not been implemented by most jurisdictions.
- The lack of a national licensing system is a major impediment to the smooth running of the industry with no fewer than nine separate jurisdictions each with their own licences which largely deny recognition of any other licences.
- The demands in some States for a recognized non-explosive material to be stored and handled as an "explosive" do not reflect the scientific reality of SSANs.
- Industry has not received adequate guidance on assessment and ranking of security risks and has concerns regarding the possibility of storage risks being overstated.

# Attachment 10 – Table of Chemical Regulators

Chemical Regulators by Jurisdiction				
Jurisdiction	Purpose/Objective	Legislation	Information	
Federal Government				
Department of Defence	Defence, including - international defence relations and defence co-operation - align to international treaties.			
Department of Health and Ageing (National Industrial Chemicals Notification and Assessment Scheme	National chemical notification scheme	Industrial Chemicals (Notification & Assessment) Act 1989.	All importers and/or manufacturers of industrial chemicals for commercial purposes must register with NICNAS.	
Department of Agriculture, Fisheries and Forestry (Australian Pesticides & Veterinary Medicines Authority)	Agricultural Chemicals Regulation	Agricultural and Veterinary Chemicals Code Act 1994 (The Agvet Code Act)		
Comcare	Major Hazard Facilities; Hazardous Substances; Dangerous Goods	Occupational Health and Safety (Safety Standards) Regulation 1994		
Department of Health and	Druge		The Office of Chemical Safety undertaken	
Department of Health and Ageing Therapeutic Goods Administration (Office of Chemical Safety)	Drugs		The Office of Chemical Safety undertakes risk assessment and provides advice on potential public health risks posed by chemicals used in the community	

ırisdiction		
Scheduling of medicines and poisons	Therapeutic Goods Act 1989	The NDPSC has been established under section 52B of the Therapeutic Goods Act 1989 and consists of State and Territory government members and other persons appointed by the Minister such as technical experts and representatives of various sectional interests.
Development of OHS Standards, Codes, Guidance Material for States to adopt	Develop OHS Standards and Codes for State adoption only - does not regulate as such.	
Transport - Regulatory Reform	Develops national model regulation for State adoption only - does not regulate as such.	Develops regulatory reform proposals to assist Australian governments in achieving their jointly agreed objective set out in the Inter-Governmental Agreement1(IGA) of: "improving transport productivity, efficiency, safety and environmental performance and regulatory efficiency in a uniform or nationally consistent manner."
	Development of OHS Standards, Codes, Guidance Material for States to adopt	Scheduling of medicines and poisons  Development of OHS Standards and Codes for State adoption only - does not regulate as such.  Codes, Guidance Material for States to adopt  Transport -  Develops national model regulation for State

Chemical Regulators by		Charter of the United Nations Act 1045	Futurnal Affairs including
Department of Foreign Affairs and Trade (ASNO)	Authority responsible for implementation of the Chemical Weapons Convention.	Charter of the United Nations Act 1945 Chemical Weapons (Prohibition) Act 1994 Comprehensive Nuclear Test-Ban Treaty Act 1998	External Affairs, including - relations and communications with overseas governments and United Nations agencies treaties, including trade agreements bilateral, regional and multilateral trade policy international trade and commodity negotiations market development, including market access trade promotion international development co-operation international security issues, including disarmament, arms control and nuclear non-proliferation
Department of Transport and Regional Services	Transport - policy advice at a national and international level.	National Transport Commission Act 2003 Road Transport Reform (Dangerous Goods) Act 1995	The Dangerous Goods Unit (DGU) provides policy advice on national and international dangerous goods matters, and provides secretariat support to the Competent Authorities Panel (CAP).  The DGU also works with the National Transport Commission (NTC) and all States and Territories on the maintenance of the Australian Dangerous Goods Code (Road and Rail) and the nationally harmonised regulatory framework.
	Maritime Security	Maritime Transport and Offshore Facilities Security Act 2003	The Act applies to Australian trading and passenger ships, and foreign ships travelling to a port in Australia. It also applies to Australian ports, port facilities, and port service providers that serve security regulated ships, and Australia's

Chemical Regulators by Ju			offshore facilities
Australian Customs Service	Illicit Drugs		
Department of Environment and Water Resources	Focus on matters of national environmental significance by:  Advising the Australian Government on its policies for protecting the environment and water resources  Information about the legislation administered by the Australian Government Environment and Water Resources Portfolio:  EPBC Act Hazardous Waste Act Heritage laws and notices Ozone protection	Environment Protection (Sea Dumping) Act 1981 Hazardous Waste (Regulation of Exports and Imports) Act 1989 National Environment Protection Council Act 1994 National Environment Protection Measures (Implementation) Act 1998 National Water Commission Act 2004 Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 Ozone Protection and Synthetic Greenhouse Gas (Import Levy) Act 1995 Ozone Protection and Synthetic Greenhouse Gas (Manufacture Levy) Act 1995 Product Stewardship (Oil) Act 2000 Water Efficiency Labelling and Standards Act 2005	

Chemical Regulators by Ju	risdiction		
Queensland Government	and synthetic greenhouse gases legislation and regulations Renewable energy (mandatory renewable energy target) legislative framework Sea dumping legislation Sea Installations Act Water Efficiency Labelling and Standards Act		
Department of Emergency Services (Chemical Hazards and Emergency Management Services)	Dangerous Goods	Dangerous Goods Safety Management Act 2001, Regulation 2001	Under the DGSM Act, the DES has primary responsibility for administration of DG. Enforcement of the Act is delegated, however, with specified classes of dangerous goods regulated by those Government agencies that have a specific interest in them. This arrangement is made possible by letters of delegation and associated Memoranda of Understanding.
	Major Hazard Facilities	Dangerous Goods Safety Management Act 2001, Regulation 2001	
Department of Employment and Industrial Relations (Workplace Health and Safety)	Hazardous Substances Regulation	Workplace Health and Safety Regulation 1997	

Chemical Regulators by Ju	ırisdiction		
Department of Natural Resources, Mines and Energy	Explosives and SSAN	Explosives Act 1999	
Local Government	Class 3 Dangerous Goods (flammable liquids)	Dangerous Goods Safety Management Act 2001, Regulation 2001	Local Government jurisdiction is limited to Class 3 (flammable liquids) and combustible liquids at premises that have (or should have) a flammable and combustible liquids (FCL) licence issued by the Local Government.
Department of Health	Drugs and Poisons	Health Act 1937; Health (Drugs and Poisons) Regulation 1996	
Queensland Transport	Dangerous Goods transport by road and rail	Transport Operation (Road Use Management—Dangerous Goods) Regulation 1998	
Environmental Protection Agency	Environmentally Relevant Activities	Environmental Protection Act 1994, Environmental Protection Regulation 1998.	Regulates "environmentally relevant activities". ERAs are usually industrial activities with the potential to release contaminants to the environment, for example chemical processing, waste treatment, spray painting etc. Some agricultural activities such as piggeries, prawn farms and cattle feedlots are also ERAs. ERAs are required to have a development approval or a code of environmental compliance and registration certificate. The Environmental Protection Regulation 1998 (EP Reg) and the Environmental Protection Policies (EPPs) for Air, Noise and Water are to be remade by September 2008.

	y Jurisdiction  Hazardous Waste	Environmental Protection (Waste	
		l I	
	Management	Management) Regulation 2000; Policy 2000	
Queensland Police	Controlled Substances	Drugs Misuse Regulation 1987	QLD Premier has recently announced new measures will be introduced to restrict sale of controlled substances - will adopt compliance provisions of PACIA Code.
Department of Primary Industries and Fisheries	Agricultural Chemicals		The Department of Primary Industries and Fisheries (DPI&F) develops and implements policy in relation to the management of agricultural and veterinary chemicals in Queensland. DPI&F is also involved in the development and implementation of national policy decisions relating to the overall management of agricultural and veterinary chemicals in Australia.
N.S.W Government			
WorkCover NSW	Hazardous Substances	Occupational Health and Safety Regulation 2001	
	Danis and Carala	On the state of th	L. 2005 H. D
	Dangerous Goods	Occupational Health and Safety Regulation 2001	In 2005, the Dangerous Goods Act 1975 was repealed and the OHS Act 2000 and Regulation 2001 were amended to regulate dangerous goods of all quantities at places of work, and certain quantities of dangerous goods at non-workplaces.
	Evplosives (SSANI)	Evaluation 2001	
	Explosives (SSAN)	Explosives Act 2003 and Regulation 2001	

Chemical Regulators by Ju	urisdiction		
Department of Environment and Climate Change (DECC)	Environmental legislation	Contaminated Land Management Act 1997, Environmentally Hazardous Chemicals Act 1985, National Environment Protection Council (New South Wales) Act 1995, Pesticides Act 1999, Waste Avoidance and Resource Recovery Act 2001, Waste Recycling and Processing Corporation Act 2001	
Department of Environment and Climate Change (EPA)	Transportation of Dangerous Goods	Road and Rail Transport (Dangerous Goods) Act 1997 and Regulation 1998, 1999	The EPA's role relates to on-road aspects of the transport of dangerous goods
	Hazardous Chemicals	Environmentally Hazardous Chemicals Act (EHC Act)	regulate priority/high-risk chemicals, throughout their entire life-cycle, to minimise environmental risks from hazardous chemicals and chemical waste in NSW.
Department of Health	Drugs and Poisons	Poisons and Therapeutic Goods Act 1966	
рерантенног пеант	Drugs and Poisons	Poisons and Therapeutic Goods Act 1900	
NSW Police	Precursors	Drug Misuse and Trafficking Regulation 2006	Recently introduced and adopts aspects of the PACIA Code. Schedules updated.
Victorian Government			
WorkSafe Victoria	Hazardous Substances and Major Hazard Facilities	Occupational Health and Safety Regulations 2007	Hazardous Substances Regulations contain licensing requirements for employers using carcinogenic substances, outline requirement for manufacturers to prepare and review MSDSs; atmospheric and health monitoring, identification of haz subs in plant.

Chemical Regulators by J	urisdiction		
	Dangerous Goods	Dangerous Goods (Storage and Handling) Regulations 2000	This governs the safe handling and storage of dangerous goods. It requires all site operators holding dangerous goods above a certain 'manifest' quantity to notify WorkSafe every two years of the quantities held.
	Transport	Road Transport Reform (DG) Regs 1997;	Requires bulk DG vehicles to be licensed, drivers to be licensed, requires approval for dangerous goods tank design.
	Security Sensitve Ammonium Nitrate - High Consequence Dangerous Goods	Dangerous Goods (HCDG) Regulations 2005	The term 'high consequence dangerous goods' (HCDG) is applied to dangerous goods that pose a security concern due to their potential for misuse and includes Security Sensitive Ammonium Nitrate. A license is required to access HCDG when they are manufactured, stored, sold, supplied, transported, used, imported or exported.
	Explosives	Dangerous Goods (Explosives) Regulations 2000	Requires licence issued by WorkSafe before manufacture, store, sell, transport, use or import any explosive, including safety cartridges and fireworks.
Department of Human Services (Health)	Drugs and Poisons	Health Act, Drugs, Poisons and Controlled Substances Act 1981; Regulations 2006	Issues licences and permits which limit the manufacture, distribution and use of drugs and poisons

Chemical Regulators by J Department of Primary	Agricultural	Agricultural and Veterinary Chemicals	The Act came into effect in 1996 and sets
Industries	Chemicals	(Control of Use) Act 1992	rules of chemical use in Victoria. The federal APVMA took over responsibility for other activity in relation to agvet chemicals, up to and including the point o sale and supply.
Environment Protection Agency	Environmental Regulations, Permits Etc	Environment Protection Act 1970 Pollution of Waters by Oils and Noxious Substances Act 1986 National Environment Protection Council (Victoria) Act 1995 There are also various other policies regarding water/Air/Wate such as State environment protection policies (SEPPs).	

Chemical Regulators by Ju	ırisdiction		
Department of Sustainability and Environment	Establishment of EPA.	Environment Protection Act 1970	This Act establishes the Environment Protection Authority and makes provision for the Authority's powers, duties and functions. See above.
Victoria Police	Prevention of Precursor Drug Diversion	Drugs, Poisons and Controlled Substances Act 1981; Regulations 2006	Whilst the Regulations have not legislated a requirement for companies to forward copies of EUDs to police, this has been flagged for inclusion by the Department of Justice. Currently, member companies are encouraged to comply with the PACIA Code for Prevention of Diversion and forward copies to VicPol Drugs Desk.
South Australia Government			
SafeWork South Australia	Hazardous Substances	Occupational Health Safety and Welfare Act 1986; Regulation 1998	
	Dangerous Goods	Dangerous Substances Act 1979; Regulation 2002	Regulates the storage, handling, transporting, conveyance, use and disposal and quality of dangerous substances
	Explosives including SSAN	Explosives Act 1936; Regulation 1996; Expolosives (Security Sensitive Substances) Regulation 2006	Regulates manufacture, storage and carriage of explosives.
	Major Hazard Facilities	Dangerous Substances and Major Hazard Facilities Bill 2006	The SA Dangerous Substnaces and Major Hazard Facilities Bill is currently before the South Australian House of Assembly. It was introduced to Parliament on 6 December 2006. It is to commence on a date set by proclamation.

Chemical Regulators by Ju	ırisdiction		
Environment Protection Authority	Regulates National Environment Protection Measures	Environment Protection Act 1993; EPA (National Pollutant Inventory) Measure	The NPI NEPM provides the framework for the development and establishment of the NPI which is an Internet database designed to provide publicly available information on the types and amounts of certain chemicals being emitted to the air, land, and water. In July 2005, the National Environment Protection Council (NEPC) commenced the statutory process to make a variation to the NPI NEPM. In June 2006, NEPC agreed to release a draft NEPM variation, impact statement and other supporting documents for public consultation.
	Waste Management	Environment Protection (Waste Management) Policy 1994	
Department of Health; SA Police	Drugs and Poisons	Controlled Substances Regulations 1996	The Act and its regulations control the manufacture, sale, supply, possession, storage and use of all poisons, therapeutic goods, drugs of dependence and prohibited substances.
Primary Industries and Resources SA	Agricultural Chemicals	Agricultural and Veterinary Products (Control of Use) Act 2002; Regulation 2004	
Western Australia			
Department of Consumer and Employment Protection	Hazardous Substances	Occupational Health and Safety Regulations 1996	
	Dangerous Goods	Dangerous Goods Safety Act 1961; Explosives and Dangerous Goods (Dangerous Goods Handling and Storage)	Legislation currently under review.

Chemical Regulators by Ju	urisdiction		
,		Regulations 1992	
	Transport	Dangerous Goods (Transport) Act 1998	
	Explosives	Explosives and Dangerous Goods (Explosives) Regulations 1963 (WA)	
	Major Hazard Facilities	National Standard for the Control of Major Hazard Facilities	WA has had a MHF program since 1997 which has adopted the National Standard under directions given by the Chief Inspector using powers of the Explosives and Dangerous Goods Act 1961.
Department of Environment and Conservation		Environment Protection Act 1986	
WA Police	Drug Diversion	Misuse of Drugs Act 1981 - amendments 2003	
Department of Agriculture; Department of Health	Agricultural Chemicals	Health (Pesticides) Regulations 1956	Western Australian legislation controls the use of agricultural chemicals once they are in the hands of the end user.
	Health Impact Assessments		Proposed scheme currently undergoing public discussion phase.
Department of Health	Drugs and Poisons	Poisons Act 1964	

Tasmania			
The Department of Tourism, Arts and the Environment (DTAE)	The Division has the leading role in the development of State Environment Protection Policies and regulations for environmental management.	Environment Management and Pollution Control Act 1994	
Department of Justice (Workplace Standards Tasmania)	Dangerous Goods	Dangerous Goods Act 1998	
	SSAN and Explosives	Security-Sensitive Dangerous Substances Act 2005 and regulations	The Act establishes that a person must have a permit that authorises the person to carry out restricted activities in relation to SSAN (Security-Sensitive Ammonium Nitrate). These restricted activities are specified by the COAG Principles.
	OLIC	Westerland Health and Cafety Act 1000	
	OHS	Workplace Health and Safety Act 1998	
Department of Human Services	Poisons	Poisons Act 1971	Agency responsible for the regulation, control, and prohibition of the importation, making, refining, preparation, sale, supply, use, possession, and prescription of certain substances and plants

Chemical Regulators by J	urisdiction		
Department of Primary Industries and Water	Agricultural Chemical Regulation	Agricultural and Veterinary Chemicals (Control of Use) Act 1995	The Chemical Management Branch of DPIW is responsible for the oversight of agricultural and veterinary chemical issues. It administers legislation to control the use of agricultural and veterinary chemicals, applies fertiliser standards and regulates animal identification systems. The Branch administers commercial spray contractor and operator licensing, authorises the use of certain restricted products, coordinates residue surveillance and management programs and liaises with the Australian Pesticides and Veterinary Medicines Authority to provide product compliance and enforcement activities.
Australian Capital Territory			
Workcover ACT	OHS	Occupational Health and Safety Act 1989	The Act applies to all workplaces in the Australian Capital Territory other than those in Commonwealth employment
	Dangerous Substances	Dangerous Substances Act 2004	covers: explosives as defined by the Australian Explosives Code, dangerous goods as defined in the Australian Dangerous Goods Code, hazardous substances as defined by the Office of the Australian Safety Compensation Council (OASCC) hazardous substances regulatory package.
Department of Health	Drugs and Poisons	Poisons and Drugs Act 1978	
Dopartment of Fleatth	Drags and roisons	T 0150115 GHG Drugs ACT 1770	
ACT Police	Illicit Drugs	Criminal Code 2002, Drugs of Dependence Act 1989	

Chemical Regulators by J	urisdiction		
Northern Territory			
Department of Health	Drugs and Poisons	Poisons and Dangerous Drugs Act	
NT WorkSafe	OHS	Work Health Act	
1			
	Dangerous Goods	Dangerous Goods Act	
Department of the Environment and Water Resources	Hazardous Waste	Hazardous Waste Act	The main purpose of the Hazardous Waste Act ('the Act') is to regulate the export and import of hazardous waste. In 1996, the Act was amended to include wastes that possess financial value, usually destined for recycling and recovery operations.
	Environment Protection	Environment Protection and Biodiversity Conservation Act 1999	