

Review of the National Industrial Chemicals Notification and Assessment Scheme

**Department of Health and Aging
Department of Finance and Deregulation**

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National Toxics Network Inc.

The National Toxics Network (NTN) was constituted in 1993 and is a not-for-profit charity. We are a community-based network of experts working on a wide range of toxic chemical pollution issues across Australia, New Zealand and the South Pacific. NTN representatives sit on various national advisory bodies and community consultative committees in relation to international chemical conventions, hazardous waste, contaminated sites, and industrial, agricultural and veterinary chemical regulation.

NTN is the Australian focal point for the International Persistent Organic Pollutants Elimination Network (IPEN) and also participates in the work of Pesticide Action Network (PAN) International. NTN is a supporting member group of the Australian Environment Network (AEN), Climate Action Network Australia (CANA) and the Lock the Gate Alliance.

For further details about the National Toxics Network please visit www.ntn.org.au

Overview

The regulation of industrial chemicals in Australia is an international, national, state and local public interest issue that affects every aspect of civil society and the environment. As such the National Toxics Network (NTN) welcomes this review and appreciates this opportunity to make a submission.

In the last decade, global trade has dramatically changed the environment in which regulators do their work. The number and types of industrial chemicals used has increased considerably, as have the types of consumer products they are added to.

As the review document notes, there has been no review of NICNAS since its establishment in 1990. We do not fully support the Productivity Commission's claim that "the current institutional and regulatory arrangements are broadly *effective* in managing the risks to health and safety" (*Chemicals and plastics regulation*, Productivity Commission Research Report, July 2008).

We consider the National Industrial Chemicals Notification and Assessment Scheme (NICNAS) is out of step with the requirements of a modern regulator of industrial chemicals in the 21st century and is inappropriately constrained by its legislation, inadequate budget, as well as a failure to fully embrace community engagement.

In essence, the community and environment continue to bare the brunt of chemical pollution. NICNAS current regulatory framework lacks regulatory teeth having few compliance powers, appropriate penalties or powers for requesting data. It is also slow to respond to emerging science and international regulatory reforms.

Industrial chemical regulation is complex and cuts across many different areas of regulation. The fact that there is not a one-stop shop for industrial

chemical regulation makes it very difficult for civil society to engage with the Government on industrial chemical management in Australia.

The existing complex regulatory framework that Australia has for industrial chemicals has resulted in major gaps in a number of areas including:

- A lack of critical exposure data such as volume and use information of industrial chemicals in commerce
- Compromised chemical assessments due to lack of basic data
- Poor uptake of critical regulatory assessment recommendations
- Regulatory gaps for public and worker health protection
- Regulatory gaps for environmental protection
- Lack of cross agency coordination
- Lack of information about importers, manufacturers and down stream users of industrial chemicals in Australia
- Lack of regulatory harmonisation with comparable overseas jurisdictions
- Uncoordinated audit, compliance and legal powers to protect human health and the environment
- Little oversight of chemicals in products.

This review of NICNAS must address these major gaps in their regulatory function otherwise it will fail in its objective of improving and enhancing the environmental and public health outcomes.

The role and functions of NICNAS as set out in the Industrial Chemicals (Notification and Assessment) Act 1989 and the extent to which they adequately reflect stakeholder expectations and international best practice, having regard to the broader context of chemicals regulation in Australia;

Industrial chemicals are used extensively in society from industrial manufacturing through to consumer articles. The full life-cycle assessment of industrial chemicals dictates that a chemicals fate ultimately resides in the environment. Therefore, the principles of sustainability and toxics elimination must underpin any regulatory framework and must be implemented across all agencies that have a role in the regulation industrial chemicals. These include the Australian Pesticides and Veterinary Medicines Authority, Therapeutic Goods Administration, Australian Competition and Consumer Commission, Food Standards Australia New Zealand, Safe Work Australia.

Restricting the role of NICNAS to the notification and assessment (as defined under the Act) is insufficient to provide adequate regulatory oversight that reflects the important principles that have been defined under international conventions and treaty's relating to best practice chemicals regulation to which Australia is signatory.¹

NICNAS liaises with industry, scientists and other international regulatory bodies on the integrity of chemical assessment science, emerging issues of concern, new technologies, regulatory models and stakeholder engagement.

¹ Brundtland Convention Rio Earth Summit 1992 SAICM, Aarhus, Bahai Conventions

Therefore, NICNAS is best placed to provide risk management regulatory advice and ensure its implementation and compliance. A closed loop regulatory model which accounts for the scientific assessment and risk management advice is best held within the same agency so that an evaluation of the effectiveness of any regulatory advice can be made and any adjustment made to improve that advice.

For example, NICNAS provides regulatory advice under the Priority Existing Chemicals (PEC) review process. In the case of the PEC review of Formaldehyde critical recommendations were made yet little if any uptake of these critical public health recommendations has occurred within other agencies. Meanwhile the USA and EU now have tighter restrictions on the use of formaldehyde. This is clearly unacceptable, yet unfortunately a common outcome of NICNAS PEC recommendations.

Rec 1. NICNAS must have powers to provide risk management and regulatory advice and ensure that it is implemented and complied with.

Community expectations about the regulation of industrial chemicals were clearly identified as a result of the Existing Chemicals Review National Public Engagement Strategy². Of particular note was the expectation that NICNAS should have the powers to ban and restrict chemicals especially those that have been banned or restricted overseas, yet still used in Australia.

Many in the community believed that the Australian government would not allow the use of chemicals that had been banned overseas or that were shown to be harmful to human health or the environment. Indeed there is considerable dismay and disbelief that our regulator did not even have these basic powers.

Other jurisdictions have identified 'chemicals of concern' and have in some cases taken action to ban or restrict priority chemicals. Yet, a number of these chemicals are still in use in Australia. The use of Bisphenol A (BPA) in baby and children products in Australia is a case in point.

While NICNAS conducts Priority Existing Chemical (PEC) assessments and provides recommendations for restriction, it has no legal mechanism to enforce compliance to ensure the recommendations are followed.

Rec 2. NICNAS must have the powers to ban and restrict chemicals.

When the Australian Inventory of Chemical Substances (AICS) was established, industry was invited to nominate chemicals to the scheme without volume and use data. Similar and comparable overseas schemes required some volume and use data. Therefore the Australian Chemical industry had a direct advantage compared to their overseas counterparts by having chemicals available for use without having the cost burden of providing critical exposure data.

Some 40, 000 chemicals are now on the AICS and are available for use in Australia, providing industry with an historical and ongoing competitive

² <http://www.nicnas.gov.au/Community/ECR%20Public%20Engagement%20Strategy%20report.pdf>

advantage. Some of these chemicals are used in Australia in high volumes. For example petrochemicals such as those used in coal seam gas drilling and fracking and related petrochemical and fossil fuel industries.

The long-term environmental and public health impacts of un-assessed existing chemicals in use in Australia are largely unknown.

NICNAS has been assessing a number of phthalates (some of which have been banned elsewhere) since 1999. Many of these are in children's toys, articles and personal care products. That it has taken over 12 years is clearly an unacceptable timeframe to assess a group of chemicals that have been banned and restricted in other countries some years ago. There is growing dissatisfaction with the level of protection afforded to Australian citizens, especially children.

The United Nations Stockholm Convention on Persistent Organic Pollutants 2001 has identified based on internationally recognised criteria, a list of 22 chemicals, which ratifying countries should eliminate. However, Australia's internal ratification process for industrial chemicals included on the Stockholm Convention is excessively slow and complicated and has left the Australian public and environment at risk.

The ability of Australia to rapidly ban or restrict the use of these industrial chemicals appears restricted by the fragmented and complex regulatory framework, as well as a lack of political will. Alarming, Australians including children have comparatively high levels of some of these chemicals (eg PFOS, Penta and Octa BDE) in their blood.

There is also a risk that Australia could become a dumping ground for these dangerous chemicals and products containing them (eg BPA baby bottles) that other countries do not permit or want.

Rec 3. NICNAS must have powers to obtain volume and use information about all chemicals in use, including existing chemicals, in Australia.

Principles of sustainability and community right to know are enshrined in a number of international chemicals management treaties Australia is signatory to. In line with these principles, the community expects that the role of regulating chemicals should include the ability to provide information on the volumes and use of all chemicals in Australia. Sound decision-making about chemical and waste management is not possible without this data.

The NICNAS mission statement states "...For the safe and sustainable use of industrial chemicals" has a hollow ring without the ability to provide such information. Innovation is stifled and capacity building a sustainable chemistry industry is compromised without such support from the regulator.

Rec 4. NICNAS must have the powers to annotate AICS to provide toxics substitution, reduction and safer alternative information.

Another important issue raised during the Existing Chemical Review (ECR) Process was that the role of NICNAS as a chemical regulator, should involve

the powers to annotate the AICS and provide industry and the community with advice about safer and less toxic chemicals.

The governance and consultation arrangements of NICNAS and the extent to which they support the effective delivery of NICNAS's functions;

NICNAS has engaged with industry for more than 20 years. In 2004 the Community Engagement Forum (CEF) was established to provide sector representation for the environment, public and worker health at a high governance level. This allowed NICNAS to directly engage with these sectors on all NICNAS reform work and activities. The role of the CEF has been a major improvement for NICNAS as a regulator and represents a commitment to engaging civil society made by Australia under a number of international conventions.

To date the CEF has produced a number of important pieces of work for NICNAS that have not only improved their performance but potentially enhanced the capability of all DoHA engagements with civil society.

Based on internationally accepted principles of stakeholder engagement, the CEF have produced:

- A Community Engagement Charter
- A Framework for the Implementation of the Community Engagement Charter
- A Standard Operating Procedure for the CEF E-Bulletin
- A Quarterly Electronic Bulletin for the Community
- A Summary and Evaluation report of the Existing Chemical Review - National Public Engagement Strategy.

The CEF co-facilitated the Public Engagement Strategy for the ECR and this has been a valuable capacity building tool for NICNAS, industry and the community in relation to the roles and expectations of a chemical regulator in Australia³.

A key message that came from the ECR process was that there is a community expectation that NICNAS provides capacity building mechanisms for civil society and industry, for example a Chemical Safety Forum. Despite considerable work by the CEF to draft a proposal for a Chemical Safety Forum, after consultation with industry the proposal appears to have been shelved. This is viewed as an example of the influence industry holds within NICNAS in determining regulatory priorities and decision-making.

The CEF provides critical representative sector submissions to NICNAS and the Government and provides expert representation on a number of related advisory groups including Nanotechnology, Cosmetics, the Existing Chemicals Review, the Low Regulatory Concern Chemicals program and a number of strategic plans.

³<http://www.nicnas.gov.au/Community/ECR%20Public%20Engagement%20Strategy%20report.pdf>

The importance and success of the CEF was evident in recent deliberations regarding the “Prioritisation of AICS”. After many years of work to devise a process to assess the backlog of un-assessed chemicals in use in Australia, strong public sector input kept the process on track at a time when it was close to being derailed by some peak industry representatives.

The support that the CEF provides NICNAS through representation and expert sector input is extremely valuable to NICNAS and upholds the Australian Government’s commitment to ‘Open and Accountable Government’⁴

Yet, the needs of civil society and other key stakeholders to engage with NICNAS are often not acknowledged or inadequately funded. NICNAS provides for 3 meetings per year for the CEF, but the workload required to ensure that these sectors can engage on a level playing field is not accounted for and therefore these sectors carry the burden of these costs. This represents a major obstacle to stakeholder engagement with NICNAS as the public/consumer health and environment sectors have little if any funding to direct to this area with an ever-increasing public interest workload.

The ability of NICNAS to meet the community expectations of a national regulator and capacity build within these sectors and for the future is compromised and restricted due to the cost recovery arrangements that focus on the registration and notification of chemicals.

Rec 5. NICNAS needs a funding model that provides for stakeholder engagement and capacity building provisions for industry, community and government for the safe and sustainable regulation of industrial chemicals in Australia.

The efficiency and effectiveness of NICNAS’s operating arrangements and business processes, with particular regard to the protection of human and environmental health, the management of risk, and compliance costs for business;

The ability of NICNAS to provide excellence in chemical assessment is constrained by the lack of power NICNAS has in accessing critical exposure information. As previously stated, this is required not only for existing chemicals, but also for all new chemicals. Without down stream use information NICNAS cannot reliably assess a chemical’s use pattern and therefore cannot fully estimate exposure scenarios essential for any chemical assessment. This is also an important capacity building issue for NICNAS in being able to engage with down stream users not only for chemical assessment information, but also for a range of related regulatory issues, including notification and registration requirements, and waste management procedures.

It is critical that NICNAS be able to address the full life cycle of a chemical, from ‘cradle to cradle’ and provide regulatory advice on the use and disposal of chemicals so as to protect human health and the environment. It is notable

⁴http://www.australia2020.gov.au/docs/government_response/2020_summit_response_9_governance.doc

that the two key recommendations relating to these issues from the ECR are the only recommendations left that have not been implemented. Their future remains uncertain with no timeframe or commitment made to implement them

Issues of environmental fate and disposal are critical components of any regulatory advice within the chemical assessment process and therefore improved liaising with downstream users would enhance the ability of NICNAS to gather data and increase their knowledge about the use of chemicals in Australia.

Rec 6. NICNAS requires increased and mandatory information gathering powers to obtain exposure data, down stream use information, adverse experience and surveillance monitoring data for human health and the environment.

Fundamental to chemical assessment is the critical issue of surveillance and monitoring for both public health and the environment. The residues of chemicals in the environment are monitored through a limited number of federal environmental programs such as the National Pollutant Inventory (NPI), yet this information is not adequately or routinely used in chemical assessments. Body burden monitoring, epidemiology, eco-toxicology and endocrine disruption studies are similarly poorly utilised in the current NICNAS chemical assessment process. Biomonitoring remains one of the best indicators of the extent of bioaccumulation and persistence of chemicals in both humans and the environment.

Rec 7. Climate change impacts must become a key component of the chemical assessment process.

Emerging issues of concern relating to climate change remain poorly addressed within the regulatory framework for assessing chemicals. Climate change considerations must become an integral component of chemical assessments to account for the impending impacts of climate in Australia, particularly in relation to changing weather patterns and associated behaviour of chemicals in the environment and the re- release of chemicals as a result of changing climate conditions for Australia, such as higher temperatures and reduced rainfall.

Any implications for and constraints on, transferring risk management functions to alternate agencies

In 2010 the issue of lead in children's playground equipment was highlighted by the discovery of excessive lead chromate levels in playground equipment in the WA town of Esperance. Some levels found were 250 times the "safe standard". The WA Department of Health posted an advisory on their website advising parents that as equipment more than 10 years old potentially releases lead chromate parents should ensure their children's hands were washed after play to minimise exposure. Many scientists believe there is no safe level of lead chromate exposure for children.

Although NICNAS has a role in assessing Lead Chromate, it does not assess products, articles or combinations of chemicals.

The ACCC assesses the safety of consumer products, including **children's** playground equipment but does not assess or have regulatory oversight for **public** playground equipment.

This is a major gap in regulation whereby there is no agency responsible for the regulatory oversight of products such as children's play equipment in public places.

Despite this issue being raised at a national level with NICNAS, the ACCC, and the OCSEH, to date, there has been no investigation into the prevalence or impact of lead chromate exposure on children from old playground equipment in Australia.

The WHO advises that lead is one of the leading causes of death and injury for children globally. Lead is also the subject of international action through the "Global Alliance to Eliminate Lead in Paint."⁵

The regulatory loop holes that exist and fail to account for the impacts on public health and the environment from products and "public articles" not regulated by the ACCC needs urgent attention so as to prevent harm to both human health and the environment, especially children.

Rec 8. Better coordination and compliance monitoring of chemical regulation is required between Australian States and Territories so that all Australian citizens have equal protection.

Finally and most importantly, the lack of assessment for the combined, cumulative and synergistic impacts of chemicals remains unaddressed by Australia's fragmented industrial chemicals regulatory framework. As demonstrated above there is no single agency responsible for ensuring that the impact of multiple chemicals that humans are exposed to on a daily basis, does not harm the long term protection of human health or the environment despite the numerous agencies involved in industrial chemicals regulation. For this reason alternative chemical assessment information, such as ecotoxicological, epidemiological and endocrine disruption studies must be considered in chemical risk and hazard assessments.

Rec 9. The Australian Government requires a single agency to assess the multiple, cumulative, additive and synergistic effects of all chemicals in use in products and articles available to the Australian population.

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⁵ http://www.who.int/ipcs/features/pb_alliance/en/index.html

