



National Toxics Network Inc.

working towards pollution reduction, protection of environmental health and environmental justice for all

PO Box 173 Bangalow NSW 2479

Australia

www.ntn.org.au

info@ntn.org.au

The National Human Rights Consultation Secretariat
Attorney-General's Department
Robert Garran Offices
BARTON ACT 2600
www.humanrightsconsultation.gov.au
humanrightsconsultation@ag.gov.au
1800 086 134.

20th April 2009

Submission to the National Human Rights Consultation on behalf of :

National Toxics Network
Friends of the Earth, Australia
Alliance for a Clean Environment Inc. WA
Contaminated Sites Alliance WA
Allergy, Sensitivity & Environmental Health Association, QLD. Inc.
Environment Tasmania
Gene Ethics
Ian Cohen MLC NSW Greens
Dr Alison Bleaney OBE MBChB FACRRM, St Helens Tasmania
The Honorable, Richard Jones, Bangalow NSW

'living in a pollution-free world is a basic human right'
- United Nations Human Rights Committee 2001

This submission focuses on the basic human right to live in a pollution free environment and the right to adequate information to protect the rights to life, health and clean water.¹ It will examine the existing links between chemical exposure, pollution and current human rights doctrine and review the significant limitations to the much-needed information that allow both government and civil society to ensure these human rights are protected.

It will address aspects of the three questions set out in the Discussion paper:

- Which human rights (including corresponding responsibilities) should be protected and promoted?
- Are these human rights currently sufficiently protected and promoted?
- How could Australia better protect and promote human rights?

National Toxics Network (NTN) believes that the right to a clean environment and the rights to adequate information on chemicals in products and the environment as well as their impacts throughout their lifecycle need to be incorporated into the human rights framework for Australia.

National Toxics Network (NTN) is a NGO (non-government organisation) network working for pollution reduction, protection of environmental health and environmental justice for all. NTN is the Australian focal point for the International POPs Elimination Network (IPEN) and works towards the full implementation of the *Stockholm Convention on Persistent Organic Pollutants (POPs)* 2001 and other relevant international and regional chemical agreements.

NTN has a particular focus on children's environmental health and intergenerational equity and is committed to a *Toxics-Free Future*, "where persistent organic pollutants (POPs) and chemicals of equivalent concern no longer pollute our local and global environments, and no longer contaminate our communities, our food, our bodies, or the bodies of our children and future generations."²

NTN joins over 700 organisations of IPEN and scores of other NGOs across the globe in committing *to work for and achieving the World Summit on Sustainable Development 2020 goal³ to minimise significant adverse effects on human health and the environment.*

¹ We note that the right to clean water is dependant on uncontaminated soil and clean air.

² Dubai Declaration for a Toxic Free Future 2005 available at www.ipen.org/campaign

³ "to achieve the sound management of chemicals throughout their life-cycle so that, by 2020, chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment. Strategic Approach to International Chemicals Management (SAICM), Overarching Policy Strategy, paragraph 13

Chemical Impacts on Human Rights

The protection of the environment is a vital part of contemporary human rights doctrine. It affects the right to life and the right to health. The International Court of Justice has found that damage to the environment undermines all human rights spoken of in the Universal Declaration and other human rights instruments.”⁴

The Universal Declaration of Human Rights (UDHR) was adopted by the General Assembly of the United Nations on 10 December 1948.⁵ Since then countries have adopted other instruments to protect human rights, including the International Covenant on Civil and Political Rights⁶ (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICESCR)⁷ and most importantly the Convention on the Rights of the Child (CRC).⁸

The right to life is protected in all these human rights instruments and the ICESCR also requires parties to “*recognise the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.*”

The UN Human Rights Committee stated that the protection of the right to life requires the State to take positive measures and that it is desirable for state parties to take all possible measures to reduce infant mortality and to increase life expectancy.⁹

The earlier treaties (UDHR, ICCPR, ICESCR) were developed before the impact of man’s industrial activities were fully understood and the environmental dimensions of human rights were not well articulated.

The more recent Convention on the Rights of the Child¹⁰ (CRC) does specifically describe a child’s right to health, adequate food and clean water, “*taking into consideration the dangers and risks of environmental pollution.*”¹¹ The CRC places an onus on all parties to ensure to the maximum extent possible the survival and development of the child.

⁴ Case Concerning the Gabcikovo-Nagymaros Project (Hungary v Slovakia), 1997 ICJ Rep 7; (25 September; sep op., Judge Weeramantry), 4. ; Also see Per C G Weeramantry J, in his separate opinion in the International Court of Justice’s decision in Gabcikovo-Nagymaros Project (Hungary v Slovakia) 1997 ICJ 97 at 110; 37 ILM 162 at 206 (1998).

⁵ Universal Declaration of Human Rights, GA Resolution 217A(III), UN Doc A/810 at 71 (1948).

⁶ International Covenant on Civil and Political Rights, opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976).

⁷ International Covenant on Economic, Social and Cultural Rights, opened for signature 16 December 1966, 993 UNTS 3 (entered into force 3 January 1976).

⁸ 17 Convention on the Rights of the Child, opened for signature 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990). Australia ratified the CRC on 17 December 1990.

⁹ UN Human Rights Committee, General comment No. 6 - the Right to Life (1982) UN Doc HRI/Gen/1/Rev.7 at 128, at paras. 1 and 5.

¹⁰ Convention on the Rights of the Child, opened for signature 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990). Australia ratified the CRC on 17 December 1990.

¹¹ Article 24 2(c) To combat disease and malnutrition, including within the framework of primary health care, through, in particular, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution;

The courts have also recognized a life without pollution as an essential human right. In 1980, the United Nations Human Rights Committee¹² found that the large-scale dumping of nuclear waste that threatened the lives of local residents amounted to a clear violation of the right to life.

In the 1994, Spanish residents sued¹³ over a waste-water treatment plant that had caused serious health problems. The European Court of Human Rights found that *'severe environmental pollution may affect an individuals' well-being and prevent them from enjoying their homes in such a way as to affect their private and family life.'* They concluded that the state had a positive duty to protect that right, for example by adequately regulating the plant.

In 2001, the United Nations Human Rights Committee found that *'living in a pollution-free world is a basic human right'* and those who pollute violate these rights. They noted that, *"Human rights cannot be secured in a degraded or polluted environment"* and that *"The fundamental right to life is threatened by exposures to toxic chemicals, hazardous wastes, and contaminated drinking water."*

In Australia, citizens every day are exposed to toxic chemicals through pesticide spray drift, air pollution, emissions from products, contaminated soil and the contamination of their drinking water and food.

Many find that they have no redress under current legislation and their only course of action is to pursue compensation in the civil courts, which is simply too expensive and too difficult for the majority of exposed citizens. While they may also take their case to the media, or their local politician or an environmental organization, none of these have proven to be effective in protecting their human rights. This is particularly important for at risk vulnerable subpopulations, such as the sick, the elderly, women of child bearing age and of course, children. Australians need the right to a pollution free-environment to be protected under a statute of human rights in their own country.

Nowhere is there a greater need for protection than in ensuring the rights of children and future generations to a pollution free environment.

Protecting the Rights of the Child

The Convention on the Rights of the Child¹⁴ (CRC) recognises the dangers environmental pollution¹⁵ and places an onus on all parties to ensure the healthy

¹² Communication No. 67/1980 : Canada. 27/10/82. CCPR/C/17/D/67/1980. (Jurisprudence)

¹³ Case of Lopez Ostra v Spain, Application no. 16798/90 [1994] ECHR 46 (9 December 1994).

¹⁴ 17 Convention on the Rights of the Child, opened for signature 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990). Australia ratified the CRC on 17 December 1990.

¹⁵ Article 24 2(c) To combat disease and malnutrition, including within the framework of primary health care, through, iner alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental

development of the child, to the maximum extent possible. To achieve the epigenetic basis of health and disease must also be considered, for once there is a mutation in a gene, this intergenerational impact that cannot easily be remedied. Australia has agreed to respect, protect and fulfill the rights of children as described by the CRC.¹⁶

Yet, the impacts of toxic chemicals on children are clearly evident in the contamination of Australian babies and children by industrial and agricultural chemicals. Australia's lack of consumer protection and the continued use of older more hazardous pesticides contribute to the multitude of chemicals now found in newborn babies and in the breastmilk they rely on.¹⁷

Since World War II, approximately 80,000 new synthetic chemicals have been manufactured and released into the environment, with approximately 1,500 new chemicals being introduced each year. The vast majority of these have not been adequately tested for their impacts on human health let alone their particular impacts on children and the developing foetus. Yet, children are exposed to hazardous chemicals through residues in their food, indoor and outdoor air pollution, and through household products and contaminated house dust. Many of these synthetic chemicals are persistent and bio-accumulative, remaining in the human body long after exposure. The developing foetus takes in toxic chemicals that have bio-accumulated in the mother's body and that readily cross over the placental barrier resulting in babies being born with many synthetic chemicals already present in their small bodies. Newborns then take more in through breast milk or formula. Yet, there are no tests to assess the combined impacts of the chemical soup to which children are exposed. Similarly, manufactured nanoparticles remain effectively unregulated in Australia and internationally, yet a whole new generation of potentially toxic chemicals are being introduced with no assessment and follow-up monitoring.

WHO, the United Nations Children's Fund (UNICEF) and UNEP have identified a growing number of children's health impacts from exposure to hazardous chemicals. These include asthma, birth defects, hypospadias, behavioural disorders, learning disabilities, autism, cancer, dysfunctional immune systems, neurological impairments, and reproductive disorders.¹⁸ Evidence grows daily on the health and environmental impacts of persistent bioaccumulative toxins like PCBs, endosulfan, brominated flame retardants and perfluorochemicals used in non stick cookware and in fabric stain treatments.

pollution;

¹⁶ UN Office of the High Commissioner for Human Rights, What are Human Rights? (2008). At: <http://www.ohchr.org/EN/Issues/Pages/WhatAreHumanRights.aspx>

¹⁷ Lloyd-Smith, Mariann; Sheffield-Brotherton, Bro, 'Children's Environmental Health: Intergenerational Equity in Action—A Civil Society Perspective.' *Annals of the New York Academy of Sciences*, Volume 1140, Number 1, October 2008, pp. 190-200(11)

¹⁸ UNEP, UNICEF & WHO. 2002. Children in the New Millennium: Environmental Impact on Health. Available at www.unep.org, www.unicef.org and www.who.int.

The WHO has stated that approximately three million children under the age of five die every year, due to environmental hazards and this is not limited to developing countries¹⁹. All children, both in the developing and developed world are affected by exposure to hazardous chemicals. In 2004, the European Union's Ministerial Conference on Children's Environmental Health concluded that reducing exposure to hazardous chemicals could save the lives of many children.

A Child's Unique Vulnerability to Chemicals

The unique vulnerability of children to hazardous chemicals is well recognized by WHO, UNICEF and UNEP.²⁰ Recent University of California research has shown that newborn children can be much more vulnerable than adults to the commonly-used organophosphate pesticides chlorpyrifos (up to 164 times more) and diazinon (up to 65 times more).²¹

Children are not simply little adults. Their bodies are still developing, their detoxification systems are immature and their protective biological barriers such as the blood-brain barrier are still developing. It has also been shown that the placenta cannot be regarded as a barrier to chemical transfer to the foetus. Children react to hazardous chemicals differently from adults.²² They are also more at risk because they have higher respiration and metabolic rates than adults, they eat and drink more per bodyweight, and they live life closer to the ground, crawling, digging in dirt and putting objects in their mouths. Being unaware of chemical risks, children are less able to protect themselves from exposures and higher skin absorption rates may also result in a proportionally greater exposure.

Children's detoxification systems and ability to excrete toxins also differs from those of adults. While at times this can offer greater protection it can also increase vulnerability, for example where a metabolite is more toxic than the original contaminant as is the case with endosulfan. Should the enzyme systems responsible for detoxification be damaged early in life, the result can be a lifetime of disabling chronic illness. The timing of chemical exposures is also significant. Recent research has shown that babies and children experience particular "windows of susceptibility" in their development.²³ If exposures occur during critical times, it may contribute to health problems much later in

¹⁹ World Health Organization / Children's Environmental Health. Available at <http://www.who.int/ceh/en/>
Accessed 23/3/2009

²⁰ Ibid. Also see IFCS Children and Chemical Safety Working Group. 2005. Chemical Safety and Children's Health: Protecting the world's children from harmful chemical exposures - a global guide to resources, October.

²¹ Furlong, C. E., N. Holland, R. J. Richter, A. Bradman, A. Ho and Brenda Eskenazi. 2006. PON1 status of farmworker mothers and children as a predictor of organophosphate sensitivity. *Pharmacogenetics and Genomics* 16:183-190.

²² Landrigan, P J et al. 1998. Children's health and the environment: A new agenda for prevention research. *Environmental Health Perspectives* 106, Supplement 3:787-794.

²³ Olin, S. R. & B. R. Sonawane. 2003. Workshop to Develop a Framework for Assessing Risks to Children from Exposure to Environmental Agents, September 2003. *Environmental Health Perspectives* 111/12: 1524-1526

life; for example, exposure to dioxin in utero can produce disabilities in neurological function and learning ability well into childhood.²⁴

Early exposure to other endocrine disruptors can affect an individual's immune function or ability to reproduce. Studies also suggest that early exposure to carcinogens can increase the risk of developing cancer later in life.²⁵

Contamination of Australian children

Studies in Europe and the U.S. have identified a wide range of chemicals in umbilical cord blood as well as in children.²⁶ These include artificial musks, alkylphenols, bisphenol-A, brominated flame retardants, perfluorinated compounds, phthalates, current and outdated pesticides and triclosan. Many are found in common products used every day in the home and school; such as cleansers, computers, toys, lotions and perfumes, cookware, clothing and carpets.

In Australia there has not been monitoring for the full range of likely contaminants, many of which are carcinogens, developmental and neurotoxins as well as reproductive poisons. However, sampling that has been carried out suggest widespread contamination of Australian babies and children.

In the early 1990s, a north coast paediatrician concerned with a chronic illness in a group of children tested their blood for levels of POPs, persistent bio-accumulative toxins (PBTs) and other volatile compounds. A range of chemicals was detected in all the children's samples, including POPs pesticides, PCBs, hexachlorobenzene (HCB), benzene and toluene.²⁷

In 1998, doctors at Townsville Hospital tested the meconium (first bowel discharge) of 46 newborn babies and found a wide range of hazardous chemicals, including persistent organic pollutants and pesticides such as chlorpyrifos.²⁸ Organophosphates like chlorpyrifos are severe neurotoxins and its metabolites had been detected in a 100% of a

²⁴ Pluim, H.J., J.G. Koppe, K. Olie, J.W. van der Slikke, P.C. Slot, & C. van Boxtel. 1994. 'Clinical laboratory manifestations of exposure to background levels of dioxins in the perinatal period. *Acta Paediatrica* 83: 583-587.; Ollsen A., J.M. Briët, J.G. Koppe, H.J Pluim, & J. Oosting. 1996. Signs of enhanced neuromotor maturation in children due to perinatal load with background levels of dioxins. *Chemosphere*: 33(7), 1317-1326.; Weisglas-Kuperus, N., T.C.J Sas, C. Koopman-Esseboom, C.W. Vanderzwan, M.A.J Deridder, A Beishuizen, H. Hooijkaas, H.& P.J.J. Sauer. 1995. Immunologic effects of background prenatal and postnatal exposure to dioxins and polychlorinated biphenyls in Dutch infants. *Pediatric Research* 38(3):404-410

²⁵ Barton, H. A., V. J. Cogliano, L. Flowers, L. Valcovic, R. W. Setzer & T. J. Woodruff. 2005. Assessing Susceptibility from Early-Life Exposure to Carcinogens. *Environ. Health Perspect.* 13(9): 1125–1133

²⁶ Environmental Working Group, Body Burden. 2005. The Pollution in Newborns; A benchmark investigation of industrial chemicals, pollutants and pesticides in umbilical cord blood. July 14. Available at <http://www.ewg.org/reports/bodyburden2/execsumm.php> Also see Greenpeace Nederland, Greenpeace International & WWF-UK. 2005. A Present for Life; hazardous chemicals in umbilical cord blood. Available at http://www.panda.org/about_wwf/what_we_do/toxics/publications/index.cf

²⁷ Budd, L. E. 1993. Children's Health & Chemicals, One Paediatrician's Experience. Unpublished Lecture Notes

²⁸ Deuble L., J. F. Whitehall, S. Bolisetty, S. K. Patole, E. M. Ostrea & J. S. Whitehall. 2000. Environmental Pollutants in Meconium in Townsville, Australia. Unpublished

sample of 416 US children (0-6 years) in the late 1990s.²⁹ Despite being severely restricted in the US, chlorpyrifos is still used widely in Australian agriculture, for termite control and in domestic products.

In 2002, Australia recommended a Tolerable Monthly Intake (TMI) of 70 picograms of dioxin TEQ per kilogram of body weight per month.³⁰ Dioxins and furans, are a group of extremely toxic unwanted industrial by-products. The Human Health Risk Assessment for Dioxins in Australians indicated that breastfed infants are consuming many times the TMI for dioxins. At a crucial time in their development, 3-month old breastfed babies are consuming at least 16 times the TMI of total dioxins.

In 2006, the Federal government initiated the testing of Australian blood and breast milk for the flame retardants, polybrominated diphenyl ethers (PBDEs). PBDEs are used in a range of electronic, computer and consumer goods, from which they 'gas off'. Testing found contamination in both blood and breast milk at levels above those of our European Union counterparts. Most notably Australian children under four had the highest levels of these carcinogenic, immunotoxic, endocrine disruptors in the population.³¹ PBDEs were also found in all indoor air, household dust and computer swipe samples tested by the Federal government.

Independent testing of the Australian population in 2005 for perfluorochemicals³² had shown similar high levels in blood and breast milk. Perfluorochemicals, like perfluorooctanesulfonate (PFOS) are used extensively for stain protection and water repellency in a wide range of products to which children are exposed. PFOS has been accessed as a persistent organic pollutant by the Stockholm Convention's Scientific Committee and will be considered by the 4th Conference of Parties to be held in Geneva in May 2009. Perfluorooctanoic acid (PFOA), and its many precursors, are used in the production of fluoropolymers for non-stick cookware coatings and in the manufacture and treatment of textiles.

PFOS is a reproductive toxin and PFOA is a likely carcinogen. Both persist in the environment and have no metabolic pathways for breakdown. In 2002, the OECD Joint Chemicals Meeting were informed of the detection of PFOS in the blood of nearly 600 US children, aged from 2-12 years.³³

²⁹ Tarplee, B., Executive Secretary, Food Quality Protection Act Safety Factor Committee Health Effects Division. 2000. Memorandum, Subject: Chlorpyrifos - Re-evaluation Report of the FQPA Safety Factor, HED DOC. NO. 014077. April 4

³⁰ National Health and Medical Research Council & Therapeutic Goods Administration. 2002. Dioxins: Recommendation for a Tolerable Monthly Intake for Australians

³¹ Toms L, Harden F, Hobson P, Papke O, Ryan J and Mueller J 2006, *Assessment of concentrations of polybrominated diphenyl ether flame retardants in the Australian population: levels in blood*, Australian Government Department of the Environment and Heritage, Canberra.

³² Kärrman A., J. F. Mueller, F. Harden, L. L. Toms, B. van Bavel & G. Lindström. 2005. Perfluorinated compounds in serum from Australian urban and rural regions. *EMG - Fluorinated Compounds*

³³ USEPA, Office of Pollution Prevention and Toxics Risk Assessment Division. 2002. Revised Draft Hazard Assessment of Perfluorooctanoic Acid and its Salts. November 4

There are many other contaminants already detected elsewhere in babies and children that Australian children have not been tested for. Yet, they are present in everyday products from which they can leach and find their way into children's systems.

Unlike Australia, the US based Centres for Disease Control have been tracking human exposure to environmental chemicals. In their second report in 2003³⁴ they presented exposure data for 116 chemicals and concluded that some like the phthalate plasticisers, were at levels in the human population where health impacts would be expected.

These findings are of particular concern for babies, children and women of childbearing age as some phthalates have been associated with the growth in numbers of boys born with hypospadias. Some phthalates are shown to be hormone disruptors, immunotoxins, cancer promoters and are reproductive and developmental toxins.³⁵ Diethylhexyl phthalate (DEHP) has been classified as a probable human carcinogen by the USEPA.

Phthalates are used as plasticizers or softening agents in many unlabelled vinyl products, including furnishings, floor coverings, medical devices (eg catheters, IV- and blood bags), babies feeding bottles, toys, teething rings, food wrap, cosmetics, perfumes, soaps, lotions and shampoos, and are also added to insecticides and adhesives. DEHP has been shown to migrate into food from certain food wraps during storage. Earlier this year, research by CHOICE found phthalates in food in jars, which used phthalates in the plastic coating of the lid.³⁶

The limited biomonitoring studies of Australian children clearly demonstrate that children's rights to health, adequate food and clean water, *'taking into consideration the dangers and risks of environmental pollution'* are not being protected. Australia, as a party to CRC, is not taking action to ensure to the maximum extent possible the survival and development of the child.

The Lack of Rights to Chemical Information in Australia

Civil society has an internationally recognised right to life and health. Yet, attempts to ensure access to adequate information to allow them to protect these rights, meets with a culture that fosters confidentiality and secrecy, rather than the open information exchange as promoted by Agenda 21.³⁷ Community right-to-know in chemical management in

³⁴ Department of Health and Human Services, Centers for Disease Control and Prevention. 2003. Second National Report on Human Exposure to Environmental Chemicals

³⁵ Lovekamp T.N. & B. J. Davis. 2001. Mono-(2-ethylhexyl) phthalate suppresses aromatase transcript levels and estradiol in cultured rat granulosa cells. *Toxicol. Appl. Pharmacol.* 172(3):217-24; Nencioni A., S. Wesselborg & P. Brossart P. 2003. Role of peroxisome proliferators-activated receptor gamma & its ligands in the control of immune responses. *Crit. Rev. Immunol.* 23:1-13; Sharpe R.M. & D.S. Irvine. 2004. How Strong is the Evidence of a Link Between Environmental Chemical and Adverse Effects on Human Reproductive Health? *British Medical Journal* 328:447-451

³⁶ Plasticisers, CHOICE tested foods in glass jars and found contaminants from the plastic used to seal the lids. Online 06/08 <http://www.choice.com.au>

³⁷ Agenda 21: Programme for Action for Sustainable Development Rio Declaration on Environmental Development, United Nations Conference on Environment and Development (UNCED), 3-14 June 1992, Rio de Janeiro, Brazil. Chapter 19 of Agenda 21, "Environmentally Sound Management of Toxic Chemicals"

Australia remains a myth, limited by the regulatory and legal systems that protect the extensive, and as yet, undefined self-interest of the chemical industry.

For instance, it is very difficult for members of the public to ascertain which products have been manufactured or treated post-production using persistent, bio-accumulative toxins. Despite clear recommendations from senior scientific institutions such as the United Kingdom's Royal Society in favour of mandatory labelling of nano-ingredients used in products³⁸, even in products such as sunscreens, cosmetics and foods, companies are not required to disclose the use of manufactured nanoparticles.

The lack of adequate labelling has left many interested members of civil society disenfranchised, unable to participate in the discussion over chemical policy options and most importantly, unable to make informed consumer choices to protect them and their family.

Similarly, informed choices regarding food and drink cannot be made as there is no information provided on pesticides used in that foods' production. Consumers are unable to choose whether to eat potentially contaminated food. This is particularly important in regards to endocrine disrupting chemicals, which can be biologically active at parts per trillion, and effects additive or even synergistic for environmental oestrogens. Pregnant mothers, those with young children, and especially those people that may also be using contaminated water or are sick are especially vulnerable.

Yet, right-to-know is recognised as an essential principle of chemical management. It was enshrined in Principle 10 of the Rio Declaration from the United Nations Conference on Environment and Development (UNCED), which acknowledged that it is in the public interest for the community to be informed, to exercise their right to understand, to make informed choices and to participate in informed decision-making.³⁹

Right to know was reiterated in the 'Bahia Declaration on Chemical Safety' at Forum III Intergovernmental Forum on Chemical Safety (IFCS) (Bahia, Brazil 2000). The declaration affirmed that an informed public is vital for effective chemical management and called on all governments to not only increase access to information on chemicals, but to recognise the community's right-to-know about chemicals in the environment and to recognise the community's right to participate meaningfully in decisions about chemical safety that affect them.

Right-to-know is also called for in the voluntary international program, the Strategic Approach to International Chemical Management (SAICM). This is in order to ensure information about chemicals throughout their life cycle, including chemicals in products, is available to all stakeholders.

focused on the generation, harmonisation and dissemination of chemical data, and strengthening capacity for chemical management. It also contained specific reference to the right of communities to chemical information and the obligations on industry and governments to generate and provide that information. 38 P86 Recommendation 12 (iii), The Royal Society and The Royal Academy of Engineering, UK (2004). Nanoscience and nanotechnologies. Available at <http://www.royalsoc.ac.uk/>

³⁹ *ibid*

Based on SAICM's Overarching Policy Strategy, appropriate information should encompass a toxic chemical's effects on human health and the environment, their intrinsic properties, potential uses, protective measures and relevant regulations.⁴⁰ While SAICM recognises the confidentiality of commercial business information (CBI), it notes that in this context, information relating to the health and safety of humans and the environment should not be regarded as confidential.⁴¹

A similar approach was taken in the *Stockholm Convention on Persistent Organic Pollutants* 2001, where Article 9.5 states "For the purposes of this Convention, information on health and safety of humans and the environment shall not be regarded as confidential."

However, this is not the practice in Australia. Products that emit persistent bio-accumulative toxins are sold with no labeling or warnings, and rural residents are simply denied information on what is used in their catchments and adjacent to their properties. Even in situations where aerial drift or over-spraying has occurred, residents have been denied information on the identity of the chemical involved.

Householders are not afforded the same level of details about hazardous substances as occupational regulations require, such as toxic pesticides in products. While warnings may be included for occupational requirements, the householder has no idea whether the pesticide may be a reproductive toxin or suspected carcinogen etc.

There were limited moves to introduce the concept public interest into the assessment of confidentiality applications for the listing of chemicals on the Australian Index of Chemical Substances (AICS), but this has not affected the assessment of confidentiality claims for commercial business information (CBI) related to industrial chemicals and domestic products.

In regards to pesticides, the *Commonwealth Agriculture and Veterinary Chemicals Act (1994)* does not require the consideration of the public interest when assessing confidentiality applications. In the case of agricultural chemicals, persistent and toxic substances are routinely released into the commons in considerable quantities. By definition, there is a public interest in the protection of the environment and our human rights from pollution.

Even in the case where the courts may find in favour of the public interest in accessing regulatory data on chemicals, there may still be significant restrictions imposed on information defined as CBI.⁴²

Freedom of information (FOI) legislation in Australia has not ensured access to pertinent information to allow individuals to protect themselves and their families from chemical

⁴⁰ SAICM Overarching Policy Strategy, para 15 (b) (i)

⁴¹ SAICM Overarching Policy Strategy, para 15 (c)

⁴² See *Rundle v. Tweed Shire Council & Anor* [1988] NSW LEC 104 (20 December 1988) Land and Environment Court of NSW, No. 40241 of 1987. This will be further discussed later in this submission

contamination. FOI Acts still provide protection for confidential information, trade secrets and any other commercial information of value. With no independent scrutiny of the allocation of CBI status, the final arbiter in the majority of FOI applications is the recipient agency, who may be under considerable pressure to maintain confidentiality.⁴³

The Failure of Community Right-to-Know in Australia

The concept of community right-to-know is subject to a wide range of interpretations but in the context of chemical management, it commonly refers to the right of members of the community to access information about chemicals, their hazards and the risks they pose.⁴⁴ Community right to know has encompassed the right to access information on the following:

- hazardous chemicals in manufacturing, processing, storage, handling, disposing and transport
- emissions/releases to the environment
- toxic chemicals used in consumer products
- chemical product labelling including inerts
- contaminated sites and chemical storage sites
- chemical usage and environmental loads
- involvement in emergency planning and siting of chemical facilities
- monitoring of chemical facilities⁴⁵

Industry's Response

In response to the growing pressure for community right to know, the Australian Chemical Industry Council (ACIC) developed a Community Right-To-Know Code of Conduct as part of the industry's Responsible Care Program.⁴⁶ The voluntary code endorsed the principle that communities had a right to know about hazardous substances stored at local premises or transported through their area. However, these rights were to be subject to 'safeguards' and the Plastic Allied Chemicals Industry Association (PACIA) members were not required to disclose information that was:

- commercially confidential,
- a trade secret,
- protected by law, or
- information that could endanger safety ("the terrorist argument")

⁴³Lloyd-Smith, M., 'Rights and Wrongs of Knowing in Chemical Conflict.' *The Drawing Board, An Australian Review of Public Affairs*. Vol.2 No 3: March 2002

⁴⁴Public Interest Advocacy Centre "Legislating for a Community Right To Know" Issues Paper No.1 prepared by Public Interest Advocacy Centre Community Right To Know Project, funded by the Law Foundation of New South Wales, March 1994 at 3.

⁴⁵Adapted from Adams, P. and Ruchel, M., "Unlocking the Factory Door! The Community Demands the Right-to-Know." Report to the Coode Island Review Panel by the Hazardous Materials Action Group, March 1992 at 4.

⁴⁶Australian Chemical Industry Council Media Release "Chemical Industry Gives Community Right To Know" 13th July 1993, plus PACIA "Responsible Care, A Public Commitment" Code of Practice, Plastics and Chemicals Industry Association Inc.

Voluntarism in community right-to-know has been severely criticised by a number of authors.⁴⁷ The voluntary nature of industry codes limits their enforceability and the implementation of the right-to-know code is dependent on individual companies or the discretion of management at individual facilities. In responses to NGO surveys, only few industries respond positively by providing adequate information.⁴⁸

Government Responses

The Commonwealth Government's response to right-to-know was the announcement of the National Pollutant Inventory (NPI) in 1992. While it was heralded as an innovative community right to know program, which would deliver information on chemicals, it was severely hampered by lack of funding and state cooperation, lack of compliance/enforcement mechanisms,⁴⁹ limited number of chemicals included in reporting list,⁵⁰ failure to include information on storage and emergency plans, and its initial exclusion of transfers (chemicals released or transferred to sewer, landfill or treatment facilities). The National Pollutant Inventory does not provide information on chemicals in products.

A Guidance Handbook⁵¹ was developed to assist jurisdictions in their evaluation of claims for confidentiality for NPI information. The Handbook notes that even if the commercially sensitive information consists of the identity of a known carcinogen, it would still be possible to conceal the exact identity of the substance while releasing sufficient generic information to make the public aware of the nature of any potential hazard.⁵²

⁴⁷ See Public Interest Advocacy Centre "Legislating for a Community Right To Know" Issues Paper No.1 prepared by Public Interest Advocacy Centre Community Right To Know Project, Funded by the Law Foundation of New South Wales, March 1994 at 6 and Gunningham, N., & Cornwall, A., "Toxics and the Community: Legislating the Right to Know" Australian Centre for Environmental Law, Law Faculty, Australian National University. Canberra, 1994 at 5.

⁴⁸ For example fewer than 30% of food and agrochemical companies responded to Friends of the Earth surveys in 2007 regarding their commercial use of nanoparticles. 24 of 67 sunscreen companies responded to the FoE 2008 survey regarding use of nanoparticles in sunscreens.

⁴⁹ NPI NEPM "S25 Enforcement provisions: (3) The Council envisages that no enforcement action will be taken for a breach of the reporting requirements that relates: (a) solely to information required for the NPI; and (b) to the first and second reporting years.(4) The Council envisages that no enforcement action will be taken for a breach of the reporting requirements that relates: (a) solely to information required for the NPI; and (b) solely to substances specified in Table 2 of Schedule A that are not specified in Table 1 of that Schedule; and (c) to the fifth reporting year. S25 (6) However, because of the cooperative basis for the NPI, the Council does not envisage that significant monetary or custodial penalties will be prescribed for breaches relating solely to information required for the NPI."

⁵⁰ While the US Toxics Release Inventory (TRI) requires the mandatory annual reporting of over 650 toxic substances, the NPI requests companies to report approximately 100 substances.

⁵¹ National Pollutant Inventory, Guidance Handbook for Facilities Claiming Commercial Confidentiality for Data Reported to the NPI, May 1999 .

⁵² Appendix C to the Guidance Handbook for Facilities Claiming Commercial Confidentiality for Data. Reported to the National Pollutant Inventory, May 1999.

Freedom of Information Legislation in Australia

While Commonwealth, State and Territory Freedom of Information Acts require disclosure of information, they too provide for comprehensive protection of commercially sensitive information, including trade secrets.

The Public Interest Advocacy Centre (PIAC) in their attempts to obtain information submitted by manufacturers in support of a new drug or medical device, have observed that Sections 38, 43 and 45 of the Commonwealth FOI Act are regularly invoked to exempt information of a commercial nature.⁵³ All three exemptions may apply to chemical regulatory data, but Section 43 and 45 have the greatest potential to impact on access to chemical information.

Section 43 provides exemption for a document, “if its disclosure under the act would disclose trade secrets; any other information having a commercial value that would be, or could reasonably be expected to be, destroyed or diminished if the information were disclosed; or information (other than trade secrets or information to which paragraph (b) applies) concerning a person in respect of his business, all professional affairs all concerning his business, commercial or financial affairs of an organisation or undertaking...”

The Administrative Appeals Tribunal (AAT) has repeatedly ruled ⁵⁴ that chemical and pharmaceutical health and safety data cannot be claimed as a trade secret. AAT also rejected arguments by the Commonwealth Government that data provided for chemical registration if released could reasonably be expected to prejudice the supply of future information to the Commonwealth. They had difficulty accepting these claims as the information was not voluntary but a legislated requirement for companies seeking approval to market a particular product in Australia.⁵⁵

Section 45 provides an exemption for a document “if its disclosure under this Act would found an action, by a person other than the Commonwealth, for breach of confidence.” Section 45 can be widely applied to information provided in a chemical regulatory setting.

⁵³ Carver, L., “Public Access To Private Commercial Information under the Freedom of Information Act 1982”, available from Public Interest Advocacy Centre 1993 at 4.

⁵⁴ PIAC v. Schering Pty Ltd (N87/537 16th August 1991); Hittich v. Department of Health, Housing, Local Government and Community Services (N92/323 16th June 1993); Searle Australia Pty Ltd v. PIAC (N88/1222 19th September 1991) .

⁵⁵ Searle Australia Pty Ltd v. PIAC (N88/1222 19th September 1991) at 28.

Protecting the Right to Information in the US

In the United States, where community right to know has its own legislation, Confidentiality restrictions to regulatory chemical data resulted in a civil action brought by the US National Coalition Against the Misuse of Pesticides in 1994.⁵⁶

In 1996, the Court ruled that with limited exceptions, the US Environmental Protection Agency (EPA) should provide information about the identity of ‘inert’ ingredients. The court agreed with public interest groups that the US EPA improperly relied on unsubstantiated claims by manufacturers that the identities of the ingredients were trade secrets.

The court ruled that EPA and the manufacturers had failed to show that competitive harm would occur from release of the identity of the majority of chemicals in the products that were the subject of the lawsuit. The US EPA was forced to disclose the inert ingredients in several pesticide formulations previously protected under commercial confidentiality.

Trade Secrets and the Public Interest

There are many definitions of the term ‘trade secret’ with a common definition being *“Any technical, commercial or other information or device occurring or utilised in the day to day activities of the home or business.”*⁵⁷ In Australia, regulatory definitions of trade secrets and CBI remain vague, yet in the area of chemical management, claims for confidentiality may encompass information as varied as product ingredients, the identity of inerts, the scientific names of industrial chemicals, their uses and import quantities, pesticide usage data, chemical storage sites and stockpile details, chemical levels in contaminated sites and the specific identity of chemical emissions.

Without a legislated right-to-know in Australia, the concept of the ‘public interest’ is essential to the community’s ability to access chemical information. In Australia, the term public interest is found in various statutes including the Industrial Chemical (Notification and Assessment) Act 1989 and State and Commonwealth Freedom of Information legislation.

The Australian judiciary has often adopted a narrow interpretation of the public interest, which is at odds with values expressed by public interest advocates, particularly in application to disputes over access to regulatory information. In this framework, there is the public interest in being able to live and work in a safe environment, and in protecting the environment from degradation and contamination.⁵⁸

⁵⁶ National Coalition Against the Misuse of Pesticides (NCAP) et al v. Carol Browner, EPA et al 1994. Civil Action No. 94–1100 November 15 Columbia Federal District Court.1996.

⁵⁷ McComas, Davidson and Gonski “The Protection Of Trade Secrets” (1981) as reported in Organon.

⁵⁸ Anderson, J., and Hounslow, B., “Toxic Chemicals” Polemic, Vol 2, No.1, February 1991 at 42.

In cases such as *Rundle v. Tweed Shire Council and Anor* 1988,⁵⁹ the courts found that there was a public interest in accessing documentation relating to the environmental and health effects of the herbicide, 2,4-D. The Commonwealth sought to be excused noting Section 20 of *The Commonwealth Agricultural and Veterinary Chemicals Act 1988* which prevented the release of any confidential commercial information in respect of a chemical product or a constituent. However, s20 (2) provides for the disclosure of confidential commercial information in respect of a chemical product to a court in any action or proceeding.⁶⁰

Despite the court's conclusion that the balance clearly favoured disclosure the judge excluded all material that fell within the category of "confidential commercial information" as defined by Section 4(1) of the *Commonwealth Agricultural and Veterinary Chemicals Act 1988*, that is:

- (a) a trade secret relating to the chemical product or constituent;
- (b) any other information relating to the chemical product or constituent that has a commercial value that would be, or could reasonably be expected to be, destroyed or diminished if the information were disclosed; or
- (c) information ... concerning the lawful commercial or financial affairs of a person, organisation or undertaking...

This case clearly highlighted the tension between the public interest in the disclosure of chemical information and the commercial interests of ongoing secrecy. While the courts are willing to protect the secrecy of CBI, with a definition so wide as to include any information relating to a chemical that has a commercial value then the application of the concept of the public interest is meaningless.

Public Interest in the Industrial Chemicals (Notification & Assessment) Act 1989

The 1997 amendments to the *Industrial Chemicals (Notification & Assessment) Act 1989* ('ICNA Act') introduced limited consideration of the public interest in the assessment of confidential listing on industrial chemicals. The ICNA Act has two sections dealing with confidential information, that is:

- listing on the confidential section of the Australian Inventory of Chemical Substances, and
- CBI provided as part of the assessment for new and priority chemicals

⁵⁹ *Rundle v. Tweed Shire Council & Anor* [1988] NSW LEC 104 (20 December 1988) Land and Environment Court of NSW, No. 40241 of 1987.

⁶⁰ The Applicant in the class 4 proceedings was seeking declaratory and injunctive relief in respect of the use by the Respondents of the herbicide 2,4-D, asserting that such use is in breach of sections 111 and 112 of the *Environmental Planning and Assessment Act 1979*.

Since coming into effect in July 1990, the National Industrial Chemical Notification and Assessment Scheme (NICNAS) assesses new industrial chemicals and existing chemicals of high concern (Priority Existing Chemicals) from chemical data packages supplied by the applicant.⁶¹ These data are held as commercial-in-confidence and when NICNAS compiles their Public Report, a company may request certain information not be published in the Public Report. This is termed 'exempt information' and the NICNAS Director can keep the information confidential if satisfied that publication could reasonably be expected to prejudice substantially the commercial interest of the applicant; and the prejudice to the applicant outweighs the public interest in the publication of the information.⁶²

The type of information typically claimed as exempt is related to the identity of the chemical, for example, chemical name, CAS number, molecular and structural formula, constituents and impurities, spectral data and specific import volumes.⁶³ Consumer and public interest NGOs have serious concern as to the usefulness of public reports on industrial chemicals when the identity of the chemical itself is withheld.⁶⁴

Recent initiatives to consider the application of the Global Harmonised Scheme (GHS) for labelling of consumer products will not address the issue of confidentiality of commercial business information as the GHS simply reflects the status of CBI protection in each of the countries implementing it.

A Case Study - Perfluorocarboxylic Acids (PFCAs) in Products

The impacts of these restrictions to adequate information are demonstrated in the following example of perfluorocarboxylic acids (PFCAs) used in a multitude of domestic products to which children are routinely exposed.

PFCAs are used in the manufacture of fluoropolymers, which are in turn used to make products such as non stick coatings for cookware, architectural fabrics, chemical processing, piping and vessels, automotive fuel systems, telecommunications and electronic wiring insulation and computer chip processing equipment.

Other fluorotelomers, based on PFCAs, are used in a wide range of consumer products, including stain and grease resistant coatings for carpets, textiles, leather, paper, including fast food packaging. They are also used in personal care and cleaning product, inks, paints and coatings, protection for stone and tiles, and in fire fighting foams.

⁶¹ NICNAS data requirements are defined in Parts A, B, C and D of the Schedule to the Industrial Chemicals (Notification & Assessment) Act 1989.

⁶² Sections 75 and 79 of the Industrial Chemicals (Notification & Assessment) Act 1989.

⁶³ NICNAS Guidelines for Establishing a Case for Confidential Listing of Chemicals on the Australian Inventory of Chemical Substances, July 2000.

⁶⁴ Australian Consumer Association submission on the Draft Guidelines for Establishing a Case for Confidential Listing of Chemicals on the Australian Inventory of Chemical Substances, July 2000.

PFCA are extremely persistent and some have demonstrated no metabolic pathway for breakdown. This means that the PFCAs released into the environment will not breakdown and will contaminate the globe forever. Their long-range transport via their precursors has meant they are now widespread throughout the environment and in wildlife, far from sources of production. PFCAs are found in breast milk and human blood including in Australian adults and children, demonstrating their strong potential for bio-accumulation. The increasing concentrations of long chain PFCAs, particularly in wildlife high on the foodchain strongly suggest biomagnification. There is evidence that the levels of some PFCAs have been doubling every 5 to 8 years in the highly vulnerable polar bear population.⁶⁵

While for some PFCAs, there are known adverse health impacts, for example, perfluorooctanoate (PFOA) has shown to be tumourigenic and immunotoxic in laboratory animals,⁶⁶ however for others, there is no toxicological or ecotoxicology data available.

The USEPA review of PFOA, used in Teflon manufacture,⁶⁷ found that it accumulates in the blood system and poses a risk for childbearing women. According to their preliminary risk assessment, the estimated exposure range for humans, based on rat studies, has already overlapped with what the USEPA deems unacceptable for toxic substances.

Yet, the potential for PFCA release from products remain largely unknown to civil society. While consumers may appreciate their properties such as oil, stain, grease, and water repellency, they remain unaware that residual un-reacted intermediates that can be left in commercial fluorotelomer based substances.⁶⁸

Consumers are also unaware that the majority of fluorochemicals used in clothing, footwear and carpet treatments are released over their lifetime. Over the average carpet

⁶⁵ Action plan on perfluorocarboxylic acids and precursors, Environment Canada and Health Canada, <http://www.ec.gc.ca/nopp/DOCS/consult/PFCA/EN/actionPlan.cfm>.

⁶⁶ PRELIMINARY RISK ASSESSMENT OF THE DEVELOPMENTAL TOXICITY ASSOCIATED WITH EXPOSURE TO PERFLUOROOCANOIC ACID AND ITS SALTS, U.S. Environmental Protection Agency Office of Pollution Prevention and Toxics Risk Assessment Division, April 10, 2003 Also see Guruge KS, Yeung LW, Yamanaka N, Miyazaki S, Lam PK, Giesy JP, Jones PD, Yamashita N., Gene Expression Profiles in Rat Liver Treated With Perfluorooctanoic Acid (PFOA). *Toxicol Sci.* 2005 Oct 12; [Epub ahead of print]; Yao X. & Zhong L., Genotoxic risk and oxidative DNA damage in HepG2 cells exposed to perfluorooctanoic acid. *Mutation Research/Genetic Toxicology and Environmental Mutagenesis* Volume 587, Issues 1-2 , 10 November 2005, Pages 38-4

⁶⁷ USEPA, Office of Pollution Prevention and Toxics Risk Assessment Division. 2003 Preliminary Risk Assessment of the Developmental Toxicity Associated with Exposure to Perfluorooctanoic Acid and its Salts. April 10.

⁶⁸ See Environment Canada, National Office of Pollution Prevention, Action Plan on Perfluorocarboxylic Acids and Precursors Available at < <http://www.ec.gc.ca/nopp/DOCS/consult/PFCA/EN/actionPlan.cfm>> "Two of the four polymers (NSN# 12763 and NSN# 12798) are reported to contain residuals of up to 2% (data submitted by the notifier), some of which may be unreacted FTOH. No residuals were reported in the polymer NSN# 12863, however based on similar polymers some residual unreacted FTOH is probable. Release of all of this residual FTOH from the polymers is expected to occur over a relatively short period of time following application. For the substances notified under NSN# 13211 and 13395, the residual fluorinated starting materials, and intermediates and by-products are on the order of 3000 ppm (total) on a dry weight basis of polymer."

lifetime of nine years, large quantities of PFCAs will escape through general traffic, vacuuming and steam cleaning. These emissions contaminate air and importantly, wastewater streams. The failure to provide adequate information also extends to the lack of data for total releases to soil, surface water and groundwater from the disposal in landfill of PFCA treated products such as rugs and carpets, furniture, fabrics, leather, paper packaging, construction waste and aerosol cans.

The failure to implement right-to-know principles was epitomized in the unlabelled use of fluorotelomer chemicals in food packaging. While there had been growing concerns about the migration into food of persistent chemicals used in their packaging, manufacturers did not see fit to investigate and ensure fluorotelomers were not able to contaminate packaged foods.

The study published by the U.S. Food and Drug Administration (FDA) in October 2005 demonstrated that the microwave popcorn bags had up to 4000 milligrams per kilogram (mg/kg) in the coating and could result in the serious contamination of the food contents, accounting for more than 20% of the average PFOA levels now measured in the blood of U.S. residents.⁶⁹

Despite PFCAs being used in a very wide range of consumer products, civil society has been kept in the dark regarding their use, impacts, disposal and the threats they pose to vulnerable wildlife.

Most importantly, people remain uninformed of their own contamination with perfluorochemicals or that of their children.⁷⁰ The Australian public is denied the information to make informed decisions, which would assist them to protect themselves and their families from persistent, bio-accumulative toxins.

Conclusion

The damaging impact of toxic chemicals and their contamination on basic human rights is indisputable. People continue to die and children, babies and wildlife continue to be poisoned in silence. The UNHRC has acknowledged that *'living in a pollution-free world is a basic human right'* and note that *"the fundamental right to life is threatened by exposures to toxic chemicals, hazardous wastes, and contaminated drinking water."* Australians' internationally recognised rights to health and life are being compromised.

To defend these rights, Australians need the right to access information to protect themselves and their children against chemical assaults. All Australia's regulatory regimes concerned with toxic chemicals and waste include broad confidentiality

⁶⁹ Science News – November 16, 2005, "It's in the microwave popcorn, not the Teflon pan", Available at <http://pubs.acs.org/journals/esthag/index.html>

⁷⁰ Lloyd-Smith, M., Perfluorocarboxylic acids (PFCAs) and Precursors- why international action is needed. Organisation for Economic Cooperation and Development (OECD) Workshop on PFCA and Precursors, Stockholm, November 2006

exemptions for largely undefined commercial information. This represents a significant limitation in accessing adequate information to protect human rights. Most importantly, these restrictions do not allow Australian civil society to adequately ensure the protection of children's human rights as defined by the *Convention on the Rights of the Child*.

As the discussion paper acknowledges, Australia's human rights obligations derive, in large part, from the international treaties to which Australia has become a party. The Convention on the Rights of the Child ⁷¹ (CRC) specifically describe a child's right to health, adequate food and clean water, "*taking into consideration the dangers and risks of environmental pollution.*"⁷²

Our submission demonstrates that these rights are being put at risk in Australia today and as a result need a strengthened, more structured and proactive approach to their protection. Australians need and deserve a human rights framework that protect them and their children from pollution, chemical assault and the contamination of their bodies.

The preferred options for Australia to ensure these human rights are protected include:

1. **Legislation;** the development of a national Human Rights Bill as a piece of Commonwealth stand alone legislation, which would reflect not only our international obligations but also incorporate those human rights identified in the current consultation, such as the right to a healthy environment as defined by the UNHRC. The Act would by its very nature recognise an individual's responsibility, as well as government and industry obligation to respect the human rights of others.

The Australian Constitution could be amended by referendum to include a bill of rights at a later date.

2. **Scrutiny of Legislation and Policy;** All future bills would need to be assessed against the agreed set of human rights as set out in legislation. A formal process to assess the human rights implications of new policy proposals would also be required. If needed the Australian Human Rights Commission could play a greater role in scrutinising legislation and /or policy for human rights compatibility

3. **Public Awareness Raising and Capacity Building;** Public participation should be enhanced through community and school activities to raise awareness of human rights issues and obligations and to help foster a culture of respect for human rights.

⁷¹ Convention on the Rights of the Child, opened for signature 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990). Australia ratified the CRC on 17 December 1990.

⁷² Article 24 2(c) To combat disease and malnutrition, including within the framework of primary health care, through, in particular, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution;