

# Declaration for safer Australian pesticide laws

8 March 2011

An open letter to the Hon. Julia Gillard MP, Prime Minister of Australia and Senator the Hon. Joe Ludwig MP, Minister for Agriculture, Fisheries and Forestry

We, the undersigned scientists, health professionals, conservationists and citizens write to you with deep concern about the way pesticides are regulated in Australia.

We support the Australian Government's intention to introduce reforms to better protect human health and the environment and strongly urge you to deliver a strengthened regulatory framework that truly results in improved protection for all Australians and our environment.

We support the following principles for a new Australian pesticide regulatory system and urge you to act decisively on this issue.

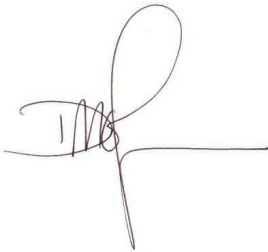
## Fundamental principles for a new pesticide regulatory system

1. The overriding priority of the regulatory system should be the protection of human health and the environment. The regulator should have a mandate to substantially reduce the load of pesticides in Australian air, soils and water and animals as well as the "body burden" in human beings.
2. There should be a requirement for all chemicals and products to be periodically assessed against contemporary safety standards in order to remain registered, every 5 to 10 years depending on risk. The regulator should retain the capacity to trigger interim safety reviews.
3. Decision-making should be based on precaution and include consideration of scientific information and social expectations. This means where reliable scientific evidence is available that a chemical may have an adverse impact on human health or the environment, the regulator does not have to wait for full scientific certainty about its harmful impacts before it can take steps to prevent damage.
4. Dangerous chemicals that do not meet contemporary health and environmental standards should be taken off the market. This should include chemicals that are at sufficient risk of being carcinogenic, mutagenic, endocrine disrupting, PBT (persistent, bioaccumulative and toxic), vPvT (very persistent and very bioaccumulative) and persistent organic pollutants (POPs).
5. High-risk chemicals should be replaced by safer alternatives wherever possible (the substitution principle). The regulator should be required to consider the international availability of other, less toxic chemicals when assessing new chemicals for registration (or an existing chemical for re-registration).
6. There should be incentives for registrants to bring low-risk chemicals to market, such as registration periods and fees proportionate to risk.
7. Risk assessments should be conducted in accordance with the best available scientific evidence, including endocrine disruption and immune function modification endpoints.

Safety testing must include the full life-cycle effects, including the effects of chemical metabolites, the effects of mixtures, the toxicity of other substances used in product formulations and impurities such as dioxins. Any reforms to improve the efficiency of the regulator must not compromise the rigor of scientific risk assessments.

8. There should be strict deadlines for the submission of data by registrants and for the completion of risk assessments by the regulator. This also means no data, no market.
9. Full information about chemicals' health and environmental risks should be provided to (and easily accessible by) the public, whilst protecting genuine commercially sensitive information. Sales data, by volume of chemical and by region, should also be made regularly available to the public.
10. Low-input, non-residual and biological agriculture should be encouraged. Low-risk chemistries and farming practices should be a priority for government-funded research, development, extension and incentives.
11. The regulator's governance should be truly independent of industry. Community interests (including for the environment, public health and consumers) should be properly represented alongside industry in the regulator's advisory structure.
12. There should be a targeted program of independent, public interest health and ecotoxicology research and monitoring to address knowledge gaps about the presence of pesticides in Australian environments and food chains, and their potential human health and environmental impacts.

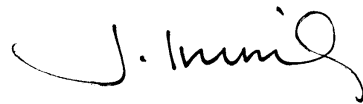
Yours sincerely,



Dermot O'Gorman  
CEO  
WWF-Australia



Jenni Mack  
Chair of the Board  
CHOICE



Jo Immig  
National Coordinator  
National Toxics Network

*For and on behalf of the signatories on the attached list*

Copies to:

The Hon. Tony Burke MP, Minister for Sustainability, Environment, Water, Population and Communities;  
The Hon. Nicola Roxon MP, Minister for Health and Ageing  
The Hon. Tony Abbott MP, Leader of the Opposition  
The Hon. John Cobb MP, Shadow Minister for Agriculture, Food Security, Fisheries and Forestry  
The Hon. Greg Hunt, Shadow Minister for Climate Action, Environment and Heritage  
The Hon. Peter Dutton MP, Shadow Minister for Health and Ageing  
Senator Bob Brown, Leader of the Australian Greens

## Background

There is increasing evidence linking pesticide exposure to serious human health risks and more awareness about harmful impacts pesticides may be having in our environment. In particular, the long-term impacts of exposure to multiple pesticides are more frequently being reported in the scientific and medical literature.

It is our children who are at greatest risk of harm. Biomonitoring studies conducted globally have measured pesticide residues in urine, blood, breast milk, placenta, babies cord serum and meconium (the first bowel discharge of newborn babies).<sup>i</sup> It is expected that Australians babies would be exposed to a similar range of chemicals.

At least 17 pesticides used in Australia are known, probable or likely carcinogens. At least 48 have suspected endocrine (hormone) disrupting properties. More than 20 have been classified as either extremely or highly hazardous by the World Health Organization.

While very little research has been done on Australian farmers' health in relation to pesticide exposure, overseas studies have linked the same pesticides used in Australia to cancers of the brain and central nervous system, breast, colon, lung, ovaries, pancreas, kidneys, testicles and stomach,<sup>ii</sup> as well as to other diseases like Parkinson's and Alzheimer's.<sup>iii</sup> In the United States, pesticide-exposed farmers, pesticide applicators, crop duster pilots and manufacturers have been found to have elevated rates of prostate cancer, melanoma, other skin cancers, and lip cancer.<sup>iv</sup>

The evidence against certain pesticides continues to grow and with cancer being a leading cause of death in Australia, costing \$3.8 billion per annum in direct health system costs,<sup>v</sup> we can no longer afford to ignore the warnings.

Pesticides also have the potential to cause harm when they move off farms and into the air, as well as creeks and rivers and other environments. One of the more highly publicised cases of pesticide pollution in Australia has been that of our most iconic natural asset, the Great Barrier Reef, with harmful concentrations of pesticides being detected up to 60 kilometres inside the Great Barrier Reef World Heritage Area. The Federal Government's *Outlook Report for the Great Barrier Reef* identified pesticide runoff as a very high risk to the Reef ecosystem, finding that nearly one third of the Reef lagoon is exposed to herbicides.<sup>vi</sup>

Monitoring studies have detected pesticides in other parts of the country including the Murray Darling Basin, Victorian and Tasmanian waterways and the Swan-Canning River System.<sup>vii</sup> Yet the full impacts of pesticides on terrestrial and marine ecosystems remain unknown because of the absence of any regular, independent and transparent environmental monitoring of pesticide residues in Australian soils, watercourses and native animals.

The presence of pesticides in waterways and inshore marine environments around Australia poses an additional concern because of the importance of these areas as nurseries for many fish species. Pesticides are often highly toxic to aquatic species, including the minute organisms upon which the rest of the food chain depends. There is growing concern that pesticides may be having harmful impacts on the ecosystems and aquatic food webs on which our fisheries industries rely. Studies have also shown that some pesticides can have direct impacts on fish – affecting their reproduction and causing physical abnormalities.<sup>viii</sup> With native fish populations already under extreme stress, we must take a precautionary approach to protect against these risks.

We believe Australia's current system is not properly managing the risks posed by pesticides. Unlike other countries, Australia does not have a systematic approach for

assessing the safety of existing chemicals. Once a pesticide is registered in Australia it remains registered in perpetuity unless it can be proven to be unsafe through a slow, ad hoc chemical review process. About 75% of the pesticides currently approved for use in Australia were “grandfathered” into the current national registration system in the mid-1990s,<sup>ix</sup> having been registered under previous arrangements. Many of those chemicals were subject to even less rigorous risk assessments than are required today, some even dating back to the 1950s.<sup>x</sup>

Nine chemicals have been under review for more than 13 years, some of these for 15 years. There is a backlog of over 40 chemicals “nominated” for review that require urgent attention. The length of time taken to review pesticides of concern in Australia is clearly unacceptable.

Australia's regulation of pesticides has fallen out of step with the rest of the world. The European Union and United States have both had re-registration programs in place to regularly re-evaluate all pesticides, the EU since 1993 and the US since 2006. More than 80 pesticides still registered in Australia have now been prohibited in Europe because of the risks they pose to human health or the environment. We believe Australian farmers and wildlife deserve the same level of protection from dangerous pesticides.

## Endnotes

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<sup>i</sup> Woodruff TJ, Zota AR, Schwartz JM 2011, “Environmental Chemicals in Pregnant Women in the US: NHANES 2003-2004”, *Environmental Health Perspectives*, doi:10.1289/ehp.100272. Multiple chemicals, including pesticides, were detected in 99% of pregnant women studied.

<sup>ii</sup> President's Cancer Panel 2009, *Reducing Environmental Cancer Risk: What we can do now*, Annual Report 2008-2009, p. 45.

<sup>iii</sup> Hayden KM, Norton MC, Darcey D, Østbye T, Zandi PP, Breitner JCS, Welsh-Bohmer KA 2010, “Occupational exposure to pesticides increases the risk of incident AD”, *Neurology*, vol. 74, pp. 1524-1530.

<sup>iv</sup> President's Cancer Panel 2009, *Reducing Environmental Cancer Risk: What we can do now*, Annual Report 2008-2009, p. 45.

<sup>v</sup> Cancer Council Australia, *Facts and figures*, <http://www.cancer.org.au/aboutcancer/FactsFigures.htm>

<sup>vi</sup> Great Barrier Reef Marine Park Authority 2009, *Great Barrier Reef Outlook Report 2009*, p. 44.

<sup>vii</sup> Swan River Trust 2009, *Non-nutrient contaminants in the Swan Canning River System*, Summary Paper, <http://www.swanrivertrust.wa.gov.au/science/river/Documents/NNCP.pdf>

<sup>viii</sup> Tillitt DE, Papoulias DM, Whyte JJ, Richter CA 2010, “Atrazine reduces reproduction in fathead minnow (*Pimephales promelas*)”, *Aquatic Toxicology*, vol. 99, pp. 149-159.

<sup>ix</sup> Productivity Commission 2008, *Chemicals and Plastics Regulation*, Productivity Commission Research Report, p. 209.

<sup>x</sup> Productivity Commission 2008, *Chemicals and Plastics Regulation*, Productivity Commission Research Report, p. 209.