AMWU

Submission to NICNAS regulatory consultation on Proposal for Regulatory Reform on Industrial Nanomaterials February 2010

For further information, contact:
[redacted]
National OHS Coordinator
AMWU

Introductory comments

The AMWU welcomes the opportunity to comment on NICNAS proposals regarding nanotechnology. Unfortunately our contribution is small however, we support the much fuller submission made by the Victorian Trades Hall Council

The full name of the AMWU is the Automotive, Food, Metals, Engineering, Printing and Kindred Industries Union. The AMWU has a membership of 120,000 members who work in every State and Territory of Australia. Our members are employed in the private and the public sectors, in blue collar and white collar positions, and in a diverse range of industries, vocations and locations.

Due to the nature of their work, AMWU members are potentially exposed to nanoparticles. But unfortunately due to the current regulatory framework, many of them will be unaware of this potential exposure. This clearly is not acceptable.

As an affiliate of the ACTU the AMWU has supported the adoption of a number of recommendations on nanotechnology – (in April 2009):

- Nanoscale chemicals must be classified as new chemicals under the National Industrial Chemicals and Notification and Assessment Scheme (NICNAS)
- Government agencies should develop new standards for the handling of nanotechnology
- A mandatory requirement that all commercial products containing nanomaterials be labelled
- That a federal registry be established of all companies and organizations manufacturing, importing and supplying products containing nanomaterials.
- A tripartite body to be established to oversee the implementation of this regulatory framework
- Adoption of the "Precautionary Principle" when dealing with nanomaterials
- Development and improvement of hazard identification, assessment and control mechanisms for nanomaterials
- Enforcement of new exposure standards using an active inspectorate
- Monitoring of the health impacts on Australian workers involved in nanotechnology and investment in related medical research.

The ACTU is also a signatory to the International Center For Technology Assessment *Principles for Nanotechnologies and Nanomaterials Oversight*.

The AMWU makes the following points regarding nanotechnology.

Overarching principles of the NICNAS regulatory strategy

Specific comments:

1. *"Managing the risks posed by new technologies"* in (a) must be replaced with *"Eliminating, or where not possible, minimising, the risks posed by new technologies"*

2. Point (a)(iii): *"Review undertaken using inclusive and transparent processes"* needs to be expanded to ensure that all relevant stakeholders (unions, community) are provided with sufficient information, assistance and opportunity to participate in any such reviews.

3. Point (c): as it has been stated and acknowledged here and elsewhere, it is undeniable that there is insufficient 'scientific evidence' to support the safety of the majority of products/chemicals containing NMs. Studies reporting close associations between nanoparticles and their adverse effects on human health are constantly being published. Therefore, it is crucial that the Precautionary Principle (see below) be adopted with regard to industrial NMs, as called for by the ACTU. The overarching principles **must** include the Precautionary Principle. To repeat an often quoted line: "Absence of evidence is not evidence of absence."

    a. This is crucial, not simply 'prudent', but necessary to ensure that, as in the first point: *"Any risk from the use of the nano-form of a chemical* ***is no greater than that posed by the conventional form of the chemical*** *or is at or below the level of acceptable risk ie humans and the environment are not exposed to unknown/unacceptable risk."*

    b. Also, we argue that it is not only "prudent" but again, critical that *'Risk (including uncertainty) is addressed* ***pre-market'*** *(our emphases)*

4. NICNAS should commit to use of the precautionary principle in handling nanomaterials. The precautionary principle has a long history of use in Australian law. The precautionary principle is warranted by the growing scientific evidence of threat of serious harm and the large extent of uncertainty that surrounds nanomaterials' behaviour and biological risks.

5. 71 governments, 12 international organisations and 39 NGOs have recommended "applying the precautionary principle as one of the general principles of [nanotechnology] risk management".

6. The third point, *'Industry innovation is supported through an appropriate level of regulatory oversight',* should be eliminated from these principles. There are other government bodies whose main role is to promote innovation in industry, through provision of funding, expertise, etc.

    NICNAS' stated mission is: *'the integrated regulation of industrial chemicals* ***for the protection of human health and the environment through scientific excellence and regulatory efficiency*** *to deliver the* ***safe and sustainable*** *use of chemicals'*. That is, NICNAS should be primarily providing the 'checks and balances' to industry innovation.

7. *"Risk assessments should be undertaken on a case-by-case basis", the AMWU notes that* risks assessments must be done on a case-by-case basis, given the wide diversity of physico-chemical properties of NMs will have a diverse effect on toxicity of these NMs. However, it is also important that a standardised nano-specific safety assessment is developed and applied to ensure confidence in individual assessments. Such an assessment is being considered internationally, though not yet finalised. This work should be considered by NICNAS.

Additional general points

8. NICNAS must ensure that both nano-forms of existing chemicals and nano-forms of new chemicals face mandatory notification and assessment.
9. There is a strong case for strategic interventions to assess the commercial use of nanomaterials as there is a gap between safety science and the validation of risk assessment procedures. Leading international authorities including the European Food Safety Authority (2009) warn that we do not yet know enough about the behaviour of nanomaterials to design reliable risk assessment.
10. NICNAS should commit to prioritising public interest management of nanomaterials, including the community's 'right to know'. Information on the types and quantities of nanomaterials used, and their use in particular products and industrial chemicals must be made freely available.
11. Nanomaterials should be defined as 'particles having one or more external dimensions measuring approximately 0.3 nanometres (nm) to 300 nm, or particles which have internal structures that exist at this scale'.
12. Neither NICNAS' permit nor certificate system is appropriate for nanomaterials. The AMWU supports a new permit category for nanomaterials. Demonstration of 'no unreasonable risk' or 'low hazard', as required to approve a permit, must require full, standardised nano-specific health and environmental assessment, where full physico-chemical characterisation is carried out and safety data are specific to the nanomaterial in question (ie not just another nano-form of that chemical composition).
13. Transparency in regulation of nanomaterials is essential. Risk assessment reports should be published in full. Further, the issuing of permits, and the related conditions, should be listed on a publicly available database, based on the US EPA's Toxics Release Inventory.
14. Labelling consumer goods and industrial chemicals in which occur nanomaterials that NICNAS regulates is essential for public health, environmental protection, workplace safety and consumer choice reasons.
15. NICNAS should initiate a joint program with ACCC to ensure that nano-labelling proceeds in a timely way.
16. Because of the ever changing nature of nano technology and the state of knowledge, any changes to legislation based on the current consultation needs to be reviewed after two years of implementation.