

12 February 2010



[REDACTED]
NICNAS
Reply Paid 58
Sydney NSW 2001

Dear Ms Hall

The Construction, Forestry, Mining and Energy Union (CFMEU) is Australia's main trade union in construction, forestry and forest products, mining and energy production. The CFMEU is a progressive trade union and has offices in all capital cities in Australia and in many major regional centres. The union has around 110,000 members and employs around 400 full time staff and officials.

Introduction

The CFMEU are grateful for the opportunity to make this submission and we appreciate NICNAS' endeavours to develop Australia's first systematic regulation of industrial nanomaterials (INMs). In this respect we note the following quote from the Discussion Paper "*NICNAS is exploring the feasibility of implementing a more comprehensive regulatory proposal for nano-forms of existing chemicals that addresses triggers identified in the Monash Report*". The CFMEU wish to participate in this process as we are concerned that our members are becoming increasingly exposed to INMs through sunscreen, paint and clothing with no regulatory controls over these products.

The CFMEU is of the view that the ACTU's April 2009 recommendations on nanotechnology form a sound basis for approaching this topic, namely that;

- 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 CFMEU draws to your attention the severe long term health effects of previous ‘wonder’ materials such as asbestos, DDT and PCBs, we must apply the precautionary principle to ensure that the use of INMs does not become the next in this list.

Discussion Paper Topics

2A Objectives of Reform

The Overarching Principles in attachment 1 must refer to the primacy of the precautionary principle. This omission is of grave concern in conjunction with the absence of a specific commitment to prioritise the public interest and environmental protection.

Further of concern is the inclusion in the Principles that NICNAS will ensure that *“Industry Innovation is supported through an appropriate level of regulatory oversight”*. This concept is absent from the NICNAS website mission statement which does prioritise the public interest and environmental protection. The principles therefore should conform to NICNAS’ mission statement and remove such reference.

The Principles state their objective as managing INM risks, this is insufficient. We propose the following in its place that *acknowledges the primacy of ILO Convention 155. “Using tripartite processes in eliminating, or where not possible, minimising, the risks posed by new technologies.”*

Both the Objectives and the Principles referred make reference to new technologies, however what is of most concern to the health and safety of our members are their currently unregulated exposure to INMs through sunscreen, paint and clothing. These issues need to be addressed urgently and are clear evidence of regulatory failure.

2B What are industrial nanomaterials?

The Discussion Paper recommends the use of 100nm as the upper limit for applying nano specific regulatory controls. The CFMEU is aware of various scientific studies that have linked carbon nanotubes larger than 100nm

with the development of mesothelioma in mice. Further that nano zinc oxide larger than 100nm is commonly used in sunscreen and paint to which our members are regularly exposed. We consider that is more important to focus on materials having or suspected of having INM properties. We therefore recommend that if a material is recognised as a 'substance with nanomaterial properties' it must be assessed using safety testing procedures and metrics developed for nanomaterials.

2C What is the current regulatory environment for industrial nanomaterials?

Given the current unregulated exposure of our members to INMs through sunscreen, paint and clothing we cannot accept the conclusions quoted in the *Monash Report*. As existing INMs are not regulated as new chemicals or labelled as such, nano versions of currently approved chemicals such as titanium and zinc dioxide have been allowed untested and unregulated onto the Australian market. So the CFMEU rejects the fundamental conclusion of the *Monash Report* that;

"Australia's federal regulatory frameworks are generally well suited to allowing adequate management and control of risks posed by engineered nanomaterials (NMs) and products incorporating NMs, and their manufacture, use and handling."

It would be more accurate to state that there is a lack of specific legislation on nanotechnologies, a significant lack of data and information on the potential risks of INMs, an absence of even the most fundamental information on INMs, such as whether they are present in the workplace. The non-existence of appropriate methods of risk assessment mean that it is highly likely that workers are being exposed to INM hazards and risks and have no idea of this exposure.

The UK's Royal Society and Royal Academy of Engineering recommended that nanomaterials be treated as new chemicals, and be subject to new safety assessments prior to their inclusion in consumer products. They further recommended that factories and research laboratories should treat nanomaterials as if they were hazardous, and until the environmental impacts of nanomaterials are better known, their release into the environment should be avoided as far as possible.

In 2008, the first recommendation of the NSW Inquiry into Nanotechnology was: *"That the New South Wales Government recommend that nano-versions of existing chemicals are assessed as new chemicals, during the review of the national regulatory framework"*.

It is essential that these findings and recommendation are implemented before it can even be considered that there is a regulatory environment for INMs.

3A Regulation of nano-forms of 'new chemicals'

All standard applications for 'new' chemicals (that is, not made under any of the exemption, permit or certificate categories) must contain information on particle size and other nano specific characteristics. Therefore allowing NICNAS to identify whether any such 'new' chemicals contain nanoparticles, if so, then a nano-specific assessment must be made, as these chemicals cannot now be considered to be 'conventional'.

a Proposal concerning NICNAS exemption categories (Low volume, transshipment and R&D)

The CFMEU agrees that nanomaterials which are 'new' chemicals be exempted from low volume/low concentration exemptions and supports this proposal. New INMs must undergo a rigorous assessment prior to their introduction.

The CFMEU supports the transshipment exemption proposal only where it can be guaranteed that there can be no human or environmental exposure. The company shipping the materials must disclose to NICNAS and the relevant OHS regulator the contents of the containers and provide information to affected workers in the form of safety datasheets. The company must ensure the labeling of all containers appropriately, including information on presence of INMs and ensure that the containers are of a suitable type and standard to prevent any spills/exposure.

With regard to research and development exemptions the CFMEU does not consider that the proposed exemption is warranted. Rather they should be treated as scheduled carcinogens are currently handled under the National Model Regulation for the Control of Scheduled Carcinogenic Substances.

b Proposal concerning NICNAS notification categories (Permits and certificates)

The CFMEU agrees that when an applicant is seeking to introduce a new chemical they must provide up front the nano status of that chemical. The CFMEU concurs with the view in the Discussion Paper that self assessment is not appropriate for INMs with NICNAS undertaking such assessments. However any such assessment must ensure that the precautionary principle is applied in all assessments and related activities.

3B Regulatory 'package' for nano-forms of 'existing chemicals'

With regard to the proposals in the Discussion Paper, the CFMEU notes that the two previous NICNAS voluntary calls for information on the use of INMs have not been successful and there is no reason to believe that another voluntary call for information will be any more successful. Therefore the CFMEU does not support this course of action and instead call for an immediate mandatory notification and assessment programme.

The CFMEU calls for all information gathered to be made publically available both through a comprehensive internet database and compulsory labeling / safety data sheets for all products and substances containing INMs.

Conclusion

The CFMEU view is that it is well overdue for the Government to adopt a tripartite integrated regulatory approach to INMs as the emerging scientific data contains early warnings of their highly toxic properties. Such an approach would encompass NICNAS and the jurisdictions' OHS and public health authorities. The first step in this process is for NICNAS to issue a mandatory call for information, with all nano-forms of existing chemicals to face mandatory notification and assessment as soon as possible. The health and safety of workers, their families and communities must be the top priority of public policy pertaining to the development and commercialisation of nanotechnology.

Yours faithfully

A handwritten signature in black ink, appearing to read 'J. Sutton', written in a cursive style.

John Sutton
National Secretary
CFMEU