



NATIONAL TOXICS NETWORK INC.
Australian IPEN Focal Group
International POPs Elimination Network
PO Box 173 Bangalow 2479 NSW Australia
ABN 61 118 160 280
Phone/Fax (Int) 612 66871900
<http://www.oztoxics.org>

Ms Kerry Scott
Project Manager
NEPC Service Corporation
Level 5, 81 Flinders Street
Adelaide SA 5000

Dear Ms Scott,

RE: Submission to National Environment Protection (Assessment of Site Contamination) Measure review Discussion Paper

The National Toxics Network Inc. is a community based network working for pollution reduction, protection of environmental health and environmental justice for all. NTN, as a national and regional network, supports community and environmental organisations across Australia, New Zealand and the South Pacific. NTN provides non-government organisations (NGOs) with a national and international voice on chemical and toxics issues.

NTN has had a long involvement in contaminated sites management, particularly in relation to the management of Persistent Organic Pollutants (POPs) through our participation in the National Advisory Body on Scheduled Waste and our role as focal point for the International POPs Elimination Network (IPEN).

As such we will limit our comments to these areas.

Health Investigation Levels

We consider the option to replace Health Investigation Levels (HILs) with a combination of ‘acceptable levels’ and ‘target levels’ for various land uses in defined settings (eg various residential, parkland and industrial uses in disturbed urban environments) is the most appropriate and workable solution.

This solution would still require a revision process for the use of the TDI/ADI as well as a review of current exposure scenarios and information on bioavailability. We believe the use of ‘acceptable levels’ and ‘target levels’ would drive cleanup of contaminated sites and provide much needed clearer guidance to consultants and auditors for contaminated site work in urban environments. It may also reduce overall costs.

Persistent Organic Pollutants

As a signatory to the Stockholm Convention on Persistent Organic Pollutants (POPs Treaty), it is essential that Australia provide adequate guidance for management of POPs contaminated sites.

To fulfill Article 6 and to develop ‘*appropriate strategies for identifying sites contaminated by chemicals listed in Annex A, B or C*’, Australia requires appropriate ‘acceptable’ and ‘target’ levels to identify and prioritise POPs contaminated sites for remediation. POPs have already been identified as international priorities and all require adequate standards. This process should include the development of a robust, open and transparent methodology, which could be utilised for emerging new POPs.

While HILs have been developed for the POPs that are commonly found in contaminated sites, such as PCBs, Aldrin/dieldrin, chlordane, DDT, and heptachlor, we do not consider that they adequately reflect the spirit of the Stockholm Convention. Nor do we consider that their development was inclusive of all stakeholders concerns. The involvement of stakeholders in the development of National Implementation Plans for POPs is required by Article 7 of the Stockholm Convention.

Acceptable and target levels should be developed for all POPs chemicals and should be in line with both our international obligations and our OECD trading partners. These standards should clearly reflect the obligation to minimise and, wherever feasible, eliminate total emissions of the POPs; PCBs, HCB, dioxins and furans.

While there remains six chemicals or groups of chemicals listed in the POPs treaty for which Australia has no HILs, including dioxins (polychlorinated dibenzo-p-dioxins) and furans (polychlorinated dibenzofurans), there is currently no consistent national system for collecting information on POPs contaminated sites and their emissions.

Arguments against assessing dioxin contamination based on costs are shortsighted and fail our Stockholm obligations. For too long, these false economic arguments have been

used to avoid addressing serious dioxin contamination of soil and sediment with extremely unfortunate and costly long-term outcomes.

While indicator substances for dioxin could be considered, this is a controversial area which may end up costing more than the original required dioxin sampling.

Carcinogenic substances

It is essential that a review of the current NEPM address the priority issue of carcinogenic substances at contaminated sites. However, we believe this priority should also be extended to substances that are mutagenic or serious reproductive toxins. We are not alone in our concerns, and nor do we support, the modified Benchmark Dose methodology (mBMD) as set out in the NHMRC Toxicity assessment for carcinogenic soil contaminants (1999).

While developing stringent 'acceptable' or more appropriately in the case of genotoxic carcinogens, 'target levels' for carcinogenic substances, would require considerable technical input and extensive consultation, and much could be gained from other OECD countries experiences. However, it is essential that this process be undertaken in an open and consultative way and in coordination with medical and research organisations.

Mixtures

As noted, methodologies for dealing with mixtures have been developed for human health risk assessment; eg tolerable monthly intake (TMI) for dioxins of 70 pg TEQ/kg bodyweight from all sources combined; and other methodologies such as the USEPA Hazard Index that allow the grouping of dissimilar substances according to their common mechanism of action. Further guidance for consultants and regulatory agencies is required by the NEPM.

We consider greater use of direct toxicity measurements including bioassays to measure the effect of mixtures, is an appropriate way of addressing this issue. These forms of measurement take into account synergistic and antagonistic effects.

Yours sincerely,

JO IMMIG

Co-ordinator, National Toxics Network Inc.