

14th September 2009

Head, UNEP Chemicals Branch, DTIE
11-13, chemin des Anémones
CH-1219 Châtelaine - Geneva
Switzerland

RE: UNEP GLOBAL MERCURY PARTNERSHIP – APPLICATION TO BECOME A PARTNER

Dear Sir/ Madam

I would like to submit an application to become a member of two of the UNEP Global Mercury Partnerships on mercury air transport and fate research and mercury control from coal combustion.

I and my research group have extensive experience in issues associated with mercury emissions and assessment. The following publications show the range of this experience, and include commissioned studies for government, the Australian Co-operative Research Centre for Coal in Sustainable Development, the Australian Coal Association Research Program, and consulting for the WA Department of Environment & Conservation on mercury emissions from gold mines.

1. Peterson C., Nelson PF, Morrison AL (2004) Quantifying Natural and Anthropogenic Sourced Mercury Emissions from Australia in 2001 – A local scale modeling assessment of transport and deposition patterns for anthropogenic mercury emissions. CRC for Coal in Sustainable Development Research Report 46, April 2004, 119 pp.
2. Nelson P.F. and Dong K. (2005) Impacts of New Legislative Controls on Mercury Emissions on Markets for Australian Coals. Final Report, ACARP C14009, 96 pp.
3. M I Attalla, H R Malfroy, S Morgan, K R Riley, P F Nelson (2004). Hazardous Pollutants in Power Station Emissions, CRC for Coal in Sustainable Development Research Report 51, November 2004, 56 pp.
4. Nelson P.F. Petersen C. and Morrison A.L. (2004) Atmospheric Emissions of Mercury – Sources and Chemistry. *Clean Air and Environmental Quality* 38, 48-55.
5. Nelson PF (2006) Atmospheric emissions of mercury from Australian point sources. *Atmospheric Environment*, in press. <http://dx.doi.org/10.1016/j.atmosenv.2006.10.029>
6. Nelson PF (2007) Mercury emissions from Kalgoorlie Consolidated Gold Mines. Report to WA Department of Environment and Conservation. 27 pp.
7. Malfroy H.R. Nguyen H. Attalla M.I. and Nelson P.F. (2003) NPI emission estimation techniques – getting it better for fossil fuelled electricity generators. *Proc. National Clean Air Conference: Linking Air Pollution Science, Policy and management (CASN03)* Newcastle, November 2003. 6 pp.

I am a member of the IEA Clean Coal Centre Mercury Group which meets yearly at Expert's Workshops on Mercury Emissions from Coal (MEC) to discuss international developments in

measurement and control of mercury emissions from coal. He has attended all six meetings of this group, in Glasgow (MEC1, 2004), Ottawa (MEC2, 2005), Katowice (MEC3, 2006), Tokyo (MEC4, 2007), Australia (MEC5, 2008) and Ljubjana. This group has recently formed a link with the UNIDO Mercury program, and the organiser, Dr Lesley Sloss, is the convenor of the UNEP Partnership on mercury control from coal combustion, and I have already participated in discussions on the activities of this partnership at MEC meetings.

In addition I have recently completed a number of relevant studies of mercury which have relevance to the work of both partnerships. These include studies of mercury emissions and speciation from coal combustion and metal smelting:

1. Strezov, Nelson & Evans, Australian Research Council-Linkage Project LP0669275 - Mercury emissions from direct iron smelting technology, in progress 2006-2009, \$420 000 (in collaboration with RioTinto/HiSmelt Pty Ltd)
2. Nelson and Malfroy, Australian Coal Association Research Program. Measurements of Mercury Speciation of Combustion of Australian Coals. Australian Coal Association Project C16046, in progress 2007-2009, \$250 000.

We have recently also undertaken major projects for the Commonwealth Department of Environment, Water, Heritage & the Arts (DEWHA) on:

1. *Legislative responses to mercury control* (Nelson *et al* (2007) Study of Current Regulatory and Voluntary Measures related to mercury in Australia. Final report to the Australian Department of Environment and Water Resources RFQ 101/0607DEW, August 2007, 135 pp)
2. *Sources, Transport and Fate of Mercury in Australia* (final draft report submitted)

Finally we have initiated a measurement program of gas phase mercury concentrations and deposition of mercury in Australia; these are among the very few studies in the southern hemisphere and should prove beneficial to the work of the partnerships.

I am committed to active participation in the work of the partnerships and to achieving their goals and objectives. Our research activity will inform the work of both groups and I am interested in taking a very active role in developing and contributing to the plans and activities of these groups.

Yours sincerely
Peter Nelson
Professor of Environmental Studies
Associate Dean Research
Macquarie University

UNEP GLOBAL MERCURY PARTNERSHIP REGISTRATION FORM *

Partnership Area	<p>Please check partnership areas that your organization intends to contribute to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> artisanal and small scale gold mining <input type="checkbox"/> mercury cell chlor alkali production <input checked="" type="checkbox"/> mercury air transport and fate research <input type="checkbox"/> mercury in products <input checked="" type="checkbox"/> mercury releases from coal combustion <input type="checkbox"/> mercury waste management <p>Please indicate in your support letter how your organization intends to contribute to each of the indicated partnership areas.</p>
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Organization Name	Macquarie University
Name, Functional Title of Representative	Professor Peter Nelson
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Type of Organization	<ul style="list-style-type: none"> <input type="checkbox"/> Government <input type="checkbox"/> Regional economic integration organization <input type="checkbox"/> Non-government Organization <input type="checkbox"/> Industry <input checked="" type="checkbox"/> Scientific community <input type="checkbox"/> Other, please specify: _____

* UNEP Global Mercury Partnership Registration Forms are to be accompanied by a letter to UNEP signifying support for the UNEP Global Mercury Partnership and commitment to achieving the partnership goal. The support letter should specify how the organization intends to contribute to meeting the goal of the UNEP Global Mercury Partnership. Please submit the support letter and registration form to:

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