Submission

to

Senate Employment, Workplace Relations and Education
References Committee

Inquiry into the Office of the Chief Scientist

Submission no: 18

Received: 4/06/2004

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Mr John Carter
Secretary
Senate Employment, Workplace Relations and Education Committee
Parliament House
CANBERRA ACT 2600

Dear Mr Carter

I am writing in response to your invitation that I appear before the Committee. In my role as Chief Scientist I wish to provide the following information.

On being a part-time Chief Scientist

There are three main reasons I accepted the invitation from the Government to become Chief Scientist.

The first is that I had for a very long time been espousing the vital role of innovation in the development and growth of nations.

Second, because I had a unique position in concurrently understanding the mind of the researchers and academics (from CSIRO in particular) and having first-hand experience of translating discovery into industry and thus the community (from Rio Tinto).

Third, because I was convinced that I could make a real difference to the role and perception of science in Australia and how Australian-made science could underpin and support the entire community technically, environmentally and economically.

My qualifications for the job

I attach my current resume and publication list to this document (Attachment 1) to attest to my professional training and competence to undertake the role of Chief Scientist.

On the potential for a conflict of interest

That there exists a perception of a potential for conflict of interest is undeniable. This was recognised and implied in my original appointment in 1999 and was effectively noted again on my re-appointment in 2002 (Attachment 2).

This potential was inevitable the moment the decision was made to select a Chief Scientist from an area outside the public sector. The real issue is: how has that potential been anticipated and properly managed?

What systems were implemented?

In recognition of the potential for conflict of interest, due process has been observed both in Rio Tinto and within the Office of the Chief Scientist. On any particular topic that would lead to a conflict of interest, I can be involved on the Government side, or on the Rio Tinto side. I can only advise both when the material is advice that I would make into the public domain.

I have also submitted full details of my pecuniary interests to the Minister and updated this material from time to time.

Within the terms of my contract with the Minister for Science I consider that I have met the requirement that at all times I act in compliance with the laws of Australia in an honest and ethical manner and in accordance with the Australian Public Service Values and Code of Conduct contained in sections 10 and 13 of the *Public Service Act 1999.*

Broad thrust of advice to the Australian Government

I attach a listing of my talks, presentations and papers since my appointment as Chief Scientist (see additional attachments).

'Science, engineering and technology underpins our future as a thriving, cultured and responsible community.'[1] This belief has been at the forefront on my thinking since my appointment as Chief Scientist. My own experience involving the extensive studies and nation wide consultation and the deliberations of the distinguished reference group that supported my first review of science and innovation in Australia confirm this belief[2]. My subsequent and detailed investigation into marine research in tropical Australia[3] and external earnings targets policy[4], consistently point to the dominant role of science and technology.

The Chance to Change is acknowledged as one of the major inputs into Backing Australia's Ability (2001).

Since the early reviews, and following extensive discussions with a wide range of groups, I have developed the themes and emphasised the importance of focussing

[1] Opening comment of *The Chance to Change: final report by the Chief Scientist,* Commonwealth of Australia (2000)
[2] *The Chance to Change: final report by the Chief Scientist,* Commonwealth of Australia (2000)
[3] *Review of Marine Research in Tropical Australia,* Commonwealth of Australia (July 2001)
[4] *Review of the External Earnings Targets Policy applying to CSIRO, ANSTO and AIMS,* Department of Education, Science and Training (May 2002)

Australia's science, engineering and technology (SET) on excellence, on collaboration, on the achievement of critical mass, on connection between the end user and the developers of ideas (including those in both publicly and privately funded R&D) and on the detailed mechanisms by which these goals can be achieved.

To develop these themes it is necessary to show their relevance to existing industries, to emerging industries and to general matters of public good such as health, ageing, the environment, security and defence.

Such an agenda must of necessity focus on education as providing the base on which SET rests, on those in universities, publicly funded research agencies, and industry who develop and implement ideas and on the role of government in supporting the innovation system. Not surprisingly, discussion has been extensive and with a wide range of participants.

I have worked energetically to develop networks, create linkages and encourage the pursuit of excellence so that Australians can compete with the best in the world and create new and fulfilling jobs and live in an environment that we are proud to pass on to future generations.

Over my years as Chief Scientist it has been increasingly obvious that Australia's' international partners and competitors are also investing strongly in science and innovation. Thus to maintain options for the future (the essence of sustainability) we must be ever more diligent in focussing our efforts. I have been active in encouraging the prioritising of research and development[5] in my discussions and in my advice to government. I have strongly argued that the increasing pace of change presents both threats and opportunities to Australia and that it was timely to undertake a further review of Australia's science and technology base. This was undertaken as a mapping exercise of science and innovation[6] in which I chaired the Reference Group.

Again, such activities have underpinned advice to whole of government, in this case, of relevance to the development of *Backing Australia's' Ability: building our future through science and innovation* (2004).

One measure of success is to point to the significant increase in public funding on my watch for research, education and innovation in Australia.

As a chemical engineer, and indeed as the President of the Institution of Chemical Engineers, I have been championing the cause of sustainability as the only end point in my advice to Government. I take the Brundtland definition that sustainability allows the advance of human prosperity without compromising the potential prosperity and quality of life for future generations. To this end, I have concentrated on economic, environmental and community matters and have noted on many occasions the limits to change that are inherent in sustainability. Economics, technology, the environment and the community are closely interlinked and sudden and fundamental shifts are not only unrealistic but threaten the entire fabric of the country. The Danckwerts Lecture on sustainability (Attachment 3) and my inaugural address as President of the Institution of Chemical Engineers spell this out (Attachment 4). Attachment 5 includes the vision paper from the last World Congress[7].

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[5] as Chair of the National Research Priorities Consultative Panel (2002)

[6] *Mapping Australian Science and Innovation: Main Report*, Commonwealth of Australia, 2003

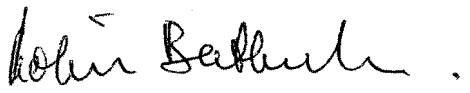
[7] Batterham, R.J., "The Chemical Engineer and the Community" – Published in *Chemical Engineering: Visions of the World.* Presented at the 6th World Congress of Chemical Engineering, Melbourne, September 2001, pp 67-90, chap 4. Published 2003 Elsevier Science B.V.

In Conclusion

As a part-time Chief Scientist, I have worked systematically and energetically to champion the cause of science and innovation within this country as the primary route to a sustainable future. My focus has at no stage been to favour any sector of the economy and my advice has always targeted across the whole of the Australian Government.

At no stage has my advice been as a consequence of direct or indirect instruction or influence of Rio Tinto and nor have I represented as Chief Scientist any particular position of Rio Tinto to the Australian Government. My part-time employment and remuneration by Rio Tinto is in no way affected by any advice I give to the Australian Government.

Yours sincerely



Robin Batterham
4 June 2004

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