The Parliament of the Commonwealth of Australia

The Senate

Committee of Privileges

Person referred to in the Senate Dr Neil Cherry

65th Report

March 1997

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The Senate Parliament House CANBERRA ACT 2600

REPORT

On 5 March 1997 the President of the Senate, Senator the Honourable Margaret Reid, received a letter from Dr Neil Cherry seeking redress under the resolution of the Senate of 25 February 1988 relating to the protection of persons referred to in the Senate (Privilege Resolution 5). The letter referred to a statement made by Senator the Honourable Richard Alston, the Minister for Communications and the Arts, in the Senate on 5 March during Question Time. The President, having accepted Dr Cherry's letter as a submission for the purposes of the resolution, referred the letter to the Committee of Privileges on the same day.

The Committee met in private session on 6 March 1997 and, pursuant to paragraph (3) of Privilege Resolution 5, decided to consider any substantive written submission received from Dr Cherry. Having received a submission from him, the Committee considered it on 20 March. In doing so, the Committee did not find it necessary to confer either with Dr Cherry or Senator Alston.

The Committee **recommends**:

That a response by Dr Neil Cherry, in the terms specified at Appendix 1, and agreed to by Dr Cherry and the Committee, be incorporated in *Hansard*.

Robert Ray Chair

RESPONSE BY DR NEIL CHERRY AGREED TO BY DR CHERRY

AND THE COMMITTEE OF PRIVILEGES

PURSUANT TO RESOLUTION 5(7)(b) OF THE SENATE OF 28 FEBRUARY 1988

In the Australian Senate on 5th March 1997, Senator Alston, Minister for Communications and the Arts, said:

"At lunch time today, Senator Kernot introduced a shameless charlatan by the name of Dr Neil Cherry in relation to the emerging research on EMR.... This bloke is a charlatan. His biographical details start off with mindless and irrelevant gobbledygook."

Senator Alston also referred to a New Zealand Environment Court case about a mobile phone base station in which I was involved, stating:

"What he does not ... say is that his side lost [the case] and he was discredited by the courts."

He also says it is "dangerous ... to associate" with me because I am a "snake oil merchant".

"Shameless charlatan" and "Snake oil merchant"

These statements not only suggest that the information I am distributing is of questionable scientific merit, but that I may receive an illicit benefit from doing so.

I am a totally independent academic scientist employed by Lincoln University in New Zealand, an institution which is held in very high regard, both nationally and internationally. I have received no financial remuneration for my research into EMR effects to date, in fact my recent international study tour was funded partly by my university's study leave fund (\$9,000), partly by the conference leave fund (\$2,448) and largely by personal finance raised through a mortgage on our house (\$18,000). I have appeared for residents in the Environment Court and in many Resource Consent Hearings and received no remuneration, not even for travel costs in these cases.

My biographical details

Three years ago when asked about this issue I openly and publicly stated that while I knew of no scientific evidence at that time to suggest adverse effects, I urged a precautionary approach, especially in relation to children, pregnant women, the frail elderly and the sick, since they would be more vulnerable than the average healthy adult to the effects of environmental contaminants and toxins.

I now have nearly three decades of preparation including advanced education in classical physics at the University of Canterbury, involving electricity and magnetism, radiation physics, the effects of microwaves on the physical properties of crystals and the use of pulsed microwaves for probing the atmosphere through using weather radar systems. This has given me an understanding of the production and transmission of pulsed and modulated radiofrequency and microwave emissions from radio, TV and mobile phones and base stations.

My research into air pollution began in 1972 at McGill University, Montreal. This, along with my research in climatology, involved the use of statistics which I later used in environmental epidemiological studies of the health effects of air pollution. This involved establishing statistically significant associations between exposure to atmospheric contaminants and increased risk of health effects. My research progression through Agricultural Meteorology (commenced in 1974) required the acquisition of biological understanding and concepts and my research into Human Biometeorology (commenced in about 1978) significantly increased my understanding of human physiology and brain function.

Thus, in 1994 I was very well placed to understand and integrate EMR research from physics, biophysics, biology, human physiology and epidemiology. What I lacked, and since have added, is an understanding of biochemistry. I have incorporated research into biochemistry for about 2 years, to complete the interdisciplinary suite of expertise required.

My professional standing and academic integrity has been recognised through my university by progressive promotion on merit to the top of the Senior Lecturer scale. I was elected by my fellow NZ meteorologists to be founding Vice President of the Meteorological Society of New Zealand and I am currently the elected National Chairperson of the Australia/New Zealand Solar Energy Society. I have been an elected Fellow of the Royal Meteorological Society since 1969 and am a professional member of several other learned societies which require a high standard of scientific ethics and performance for maintained membership status.

Internationally my expertise has been utilised by the World Bank, the Governments of the Netherlands and Sri Lanka and the United States Department of Energy through Battelle Pacific Northwest Laboratories. I have been engaged as a professional consultant by Telecom (South Island), the Electricity Corporation of New Zealand, Horticultural Companies, Insurance Companies and New Zealand Crown Research Institutes.

New Zealand Court case

Senator Alston referred to a New Zealand Environment Court case of a mobile phone base station in which I was the scientific team leader on behalf of residents in opposition to the site. He stated that I, and my team, were discredited because the court allowed the site to proceed.

Our team included Professor John Goldsmith, an internationally eminent Professor of Epidemiology from the Ben Gurion University of the Negev, Israel; and Associate Professor Richard Luben, University of California, Riverside and President of the International Bioelectromagnetics Society and member of several US federal standards committees. *None*

of my team was required to retract any of our evidence under sustained cross-examination. The expert witness for the applicant, Dr Michael Repacholi, however, was required to step back from a number of his statements, including an admission about a critical piece of evidence, that was only presented "with tongue in cheek".

While the base station was approved, it was subject to the tightest legally enforceable public exposure condition in the Western World, not exceeding $2~\mu\text{W/cm}^2$ at the nearest dwelling. Our team welcomed this decision as a major step forward in the recognition of the appropriateness of limiting exposure to less than 1% of the current Australia/New Zealand public exposure standard.

The decision stated that at this level $(2 \,\mu W/cm^2)$ they knew of no evidence of adverse effects, "even a potential effect of low probability and high potential impact", but that the condition should be reviewed with the availability of new evidence. I have concentrated since that time on collecting, analysing and reviewing this new and unpresented evidence in preparation for the next hearing of the Environment Court. It was a small portion of this evidence which I presented in my talk at Parliament House.

All of the evidence which I use is from internationally published material from reputable peer-reviewed scientific journals and/or from reports from laboratories and universities of high international scientific standing. I have personally visited many of these institutions and discussed the research results with the original researchers.

My recent visits included the US EPA, Johns Hopkins University, University of Washington, University of North Carolina, Medical College of Virginia, University of California (Davis and Riverside) Loma Linda Veterans' Research Centre, Karolinska Institute, Medical University of Lubeck, University of Aberdeen.

Senator Alston's "no evidence" claim

Finally, Senator Alston claimed that "there is absolutely no evidence to support these scaremongering campaigns and they have been discredited in court." This statement is demonstrably untrue.

There is an immense amount of published scientific research showing many non-thermal effects of radiofrequency/microwave radiation at the cellular level, including cell cycle alteration, calcium ion efflux, altered DNA synthesis, single and double-strand DNA breakage, altered lymphocyte activity, altered cell membrane permeability, altered cellular cyclic AMP, enhanced Ornithine Decarboxylase (ODC) activity and altered cellular signal transduction.

EMR is shown to reduce the production of Pineal Melatonin which is a clear and direct plausible mechanism for increased cancer risk, sleep disruption, chronic fatigue disorder and reduce immune system competence. Live animal experiments have found all of these cellular changes and many others.

Public health studies (epidemiological surveys) have found statistically significant associations in cancers at many sites in the body, sleep disruption, chronic fatigue syndrome, impairment of children's performance, miscarriage and birth defects, altered human EEG and circadian rhythm and several other adverse effects.

It appears likely that the Minister is making his statements in the Senate on the advice of his departmental officials and the staff of the Australian Radiation Laboratory since his statements are consistent with public statements of the members of the DOCA "EMR Road Show". Their statements include the claim that "there is no evidence of effects" or alternatively "no substantiated evidence of effects" and there have been many derogatory and potentially defamatory statements about my work, qualifications and statements.

In conclusion, although I regard the Minister's remarks as intemperate and unhelpful, I do not blame him, so much as regret the quality of the advice that he continues to receive from his department.

I thank the Senate for the opportunity to present this right of reply. I would be happy to make a substantial presentation of the evidence I have collected and reviewed perhaps to one of your Senate Committees.

Dr Neil Cherry