

# TORO ENERGY PROMOTES RADIATION JUNK SCIENCE

May 2012

Toro Energy is an Australian company involved in uranium exploration in Western Australia, the Northern Territory, South Australia and in Namibia, Africa. The company's most advanced project is the proposed Wiluna uranium mine in the WA Goldfields.

Toro Energy has consistently promoted the fringe scientific view that exposure to low-level radiation is harmless. Toro Energy has sponsored at least three speaking visits to Australia by Canadian scientist Dr Doug Boreham, who argues that low-level radiation is actually beneficial to human health.

Those views are at odds with mainstream scientific evidence and expert assessment. For example:

- A 2010 [report](#) by the United Nations Scientific Committee on the Effects of Atomic Radiation states that "the current balance of available evidence tends to favour a non-threshold response for the mutational component of radiation-associated cancer induction at low doses and low dose rates."
- The 2006 [report](#) of the Committee on the Biological Effects of Ionising Radiation (BEIR) of the US National Academy of Sciences states that "the risk of cancer proceeds in a linear fashion at lower doses without a threshold and ... the smallest dose has the potential to cause a small increase in risk to humans." The report also concludes that claims that low-level radiation exposure may be beneficial to human health are "unwarranted".
- A [review](#) published in the Proceedings of the National Academy of Sciences (US) in 2003 concluded that: "Given that it is supported by experimentally grounded, quantifiable, biophysical arguments, a linear extrapolation of cancer risks from intermediate to very low doses currently appears to be the most appropriate methodology."

It is irresponsible for Toro Energy to consistently promote fringe scientific views and to ignore mainstream scientific evidence and expert assessment.

Even more alarming is that Toro Energy has sponsored "employee radiation training" by Dr Boreham. Recent scientific research has heightened concern about exposure to radon, the main source of radiation doses to uranium industry workers. In 2009, the International Commission on Radiological Protection concluded that radon gas delivers almost twice the radiation dose to humans as originally thought and the Commission is in the process of reassessing permissible levels. Previous dose estimates to miners need to be approximately doubled to accurately reflect the lung cancer hazard.

We call on Toro Energy to stop promoting fringe scientific views to uranium industry workers and to the public at large.

*PTO for 45 signatures*

**Signatories (all medical doctors working in Australia, or retired from working in Australia):**

1. Margaret Beavis MBBS FRACGP
2. Peter Karamoskos MBBS, FRANZCR
3. Hilary Tyler MBChB, FACEM
4. Tilman Ruff MBBS (Hons), FRACP
5. Jenny Grounds MBBS, DRANZCOG, Grad Dip Med Acup.
6. Bill Williams MBBS
7. Rosalie Schultz MBBS, FAFPHM
8. James Rossiter AM, DU Deakin Honoris Causa, FRACP, FRCP Ed, MRCS, LRCP, MMSA, DCH, DOBstRCOG
9. Rachel Darken MBBS, DPM
10. Michael Fonda MBBS, B.Med.Sci, FRACGP
11. Sue Wareham OAM, MBBS
12. Peter Shannon, MBBS, DPM, FRANZCP
13. Jason Garrod MBBS, FACRRM
14. Simon Leslie MBBS
15. Ben Bartlett MBBS, MPH, FAFOEM, FAFPHM, MRACGP
16. Fiona Russell BMBS, FRACP, MPHTM, Grad Dip(Clin Epi), PhD
17. Megan Passey B.Med (Hons), MPH, MSc, DipFP
18. Ken Harvey MBBS, FRCPA
19. Sandra Thompson BSc(Med), MBBS, MPH, PhD, Grad Dipl Management
20. Marion Carey MBBS (Hons.), MPH, FAFPHM, FRSPH
21. George Crisp MBBS, MRCGP
22. Harry Cohen AM, MBBS, FRACOG
23. Heath Kelly MBBS, Bsc, MPH, FAFPHM
24. Catherine Silsbury MBBS, MHSc, FACHAM
25. Colin D. Butler BMedSci(Hons), BMed, DTM&H, MSc(epi), PhD
26. Peter Tait MBBS, DipRACOG, FRACGP, MClimChng, MPHAA
27. Stephen Connor MBBS, MPH, BPharm (Hons), MRPharmS, Dip.Clin. Pharm
28. Chris Wright MBBS, FRACP, FCICM
29. Bobby Sundaralingam MBBS, FRANZCR, ANZSPNM, BSc
30. Frederick Mendelsohn MD, PhD, FRACP, FAA, AO
31. Sally Attrill MBBS, B.Med.Sci., FRACGP, DRANZCOG
32. Elizabeth Moore MBBS
33. Ruth A. Mitchell BMBS, BA, BSc
34. Janet Bodycomb BSc, MBBS, FRACGP
35. Adam Badenoch BSc BMBS
36. Kristen Pearson MBBS, FRACP
37. Jane Ralls MBBS MRCGP (UK)
38. Tom Keaney MBBS
39. Peter Markey BMBS, DA, DRCOG, DTM&H, MPH, FAFPHM
40. Alison Creagh MBBS, DRANZCOG
41. Linda Selvey MBBS(Hon), PhD
42. Lucy Owen MBBS
43. Kate Jackson MBBS, DTM+H, FRCA, FACHPM (RACP), FFPMANZCA
44. Lisa Bohlscheid MBBS, FRACGP
45. Miriam Brooks MBBS, FRACGP