

**Submission
No 4**

FORMER URANIUM SMELTER SITE, HUNTER'S HILL

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Date received: 26/06/2008



HENRY DAVIS YORK
LAWYERS

**SUBMISSION TO GENERAL PURPOSE STANDING COMMITTEE NO 5 INQUIRY INTO
FORMER URANIUM SMELTER AT NELSON PARADE, HUNTERS HILL**

**Dr Nicholas Brunton
On behalf of Peter and Michelle Vassiliou**

Introduction

1. We act for the owners of No 11 Nelson Parade (the **Property**), Peter and Michelle Vassiliou (the **Owners**). This is a submission on their behalf to the inquiry.
2. The owners bought 11 Nelson Parade Hunters Hill in 2001 and have rented it out since that time. The first they knew about potential contamination issues was in December 2007. At that time they received a brochure prepared by consultants to the Department of Health Department which described the proposed remediation of radioactive contamination on No 7 and No 9 Nelson Parade. This land is owned by the Heath Administration Corporation (hereafter referred to as the Health Department). They asked us to investigate whether their Property could be affected.
3. Following extensive delays to requests for information from the Department of Health, we asked to see the files of Hunters Hill Council. Those files revealed a number of reports that indicated that No 11 was likely to be seriously contaminated. As a result, in February 2008 the Owners advised their agent the house could no longer be leased. The property at that time was being advertised for rental. It was immediately taken off the market and has since remained vacant.
4. After we wrote to the Department of Health requesting information, the Department engaged ANSTO to undertake a screening survey of external gamma radiation at a number of properties in Nelson Parade. This survey was not a comprehensive radiological health risk assessment. The report by ANSTO is enclosed in document 13 in the annexure. Importantly, the ANSTO report states on page 3:

This report details the areas surveyed and the gamma radiation levels measured during the recent ANSTO site visit. It does not consider the potential dose arising from the inhalation of radon, radioactive dusts, or the ingestion of particles, or assess the actual level of radioactive material present in the soil.

5. The ANSTO survey confirmed that No 11 is affected by contamination. However, the Department of Health and the Minister Assisting the Minister for Health (Cancer) have both suggested the effective dose to residents from gamma radiation would be below the levels recommended by the Australian Radiation Protection and Nuclear Safety Agency (**ARPANSA**). This is not a conclusion made by ANSTO in their report but appears to be an interpretation of the results by the Department of Health.
6. After refusing to pay for a more comprehensive study, our clients were forced to retain independent experts to carry out their own. This more comprehensive study was undertaken by Dr Joe Young of Australian Radiation Services Pty Ltd (**ARS**). That investigation has confirmed the site is dangerously contaminated with radioactive waste. Specifically the ARS report states:
 - (a) 14 of the 27 locations measured at No. 11 for the absorbed dose rate "free-in-air" from external gamma radiation exceed $0.35 \mu\text{Gy}\cdot\text{h}^{-1}$. This is the criteria adopted by the NSW Department of Health for the cleanup of No. 7 and No. 9 Nelson Parade (GHD,2002).
 - (b) The majority of soil samples indicate radiation activity concentrations significantly greater than those levels normally encountered in soils. Some results show levels approximately 400 times background levels.
 - (c) The effective dose to an individual residing on the site is likely to be well above the ARPANSA limits of 1 mSv above background. The likely levels at No 11 may be within the range 0.7 – 2.5 mSv above background from external gamma ray exposure alone.
 - (d) This does not include the additional exposure that may be incurred by inhalation of radon gas or from ingestion or inhalation of soil material from the disturbance of surface soils.
 - (e) Even without the additional data, the evidence suggests the site is unfit for long-term human habitation without remediation.
7. Our clients have three young children. They hoped this would be their dream home. That now cannot occur. They can't live in the house, they can't rent it out, they can't renovate or even undertake minor improvements to the house and yard. If it was put on the market the owners are legally required to disclose the contamination. It would be impossible to sell the property.
8. Our clients believe the only appropriate solution is for the Department of Health to acquire our clients' property and fully remediate all of the affected properties. This may require other sites to also be tested in detail so that no one else is exposed to further radiation.
9. A range of questions need to be answered by the Inquiry. These are set out below.

The history of land ownership

10. From 1911-1916 the area on the south side of Nelson Parade Hunters Hill was owned by the Radium Hill Company. Following the closure of the uranium processing factory, the land was then subdivided and sold.

11. Following a major study of the contamination in 1977, the Government acquired various parcels of land. These included No 11 which it bought on 16 February 1980 and held until 8 June 1989.
12. The Department of Health allowed officers of the Department to live in No 11 purportedly for "safety and security reasons" during the period that it owned the Property.
13. For reasons which remain a mystery, the Department then No 11 to a private person. That person then sold it to our clients on 26 November 2001.
14. The Government also acquired 9 Nelson Parade on 5 October 1978 and No 7 Nelson Parade on 23 May 1983. Both these sites remain in government ownership through the Health Administration Corporation.

The dangers of radiation contamination

15. A number of detailed reports are annexed to this submission. It is recommended that Document 14 be read to obtain an understanding of the principles of radiation.
16. In terms of human exposure, there are four key pathways. The first is external gamma radiation which is a high energy form of radiation that can harm internal human organs without the person being exposed to the inhalation of gas or ingestion of particles or dust. It is therefore a major health hazard.
17. The second pathway is the inhalation of radon gas which is emitted from the decay of radioactive material in the soil. Radon gas is a known human carcinogen and it can build up in homes constructed on soils that contain radioactive waste.
18. The third pathway is the ingestion of dust and particles from radioactive soils. This pathway is particularly problematic for children but also for people who work in gardens or the yards of dwellings with soil contamination.
19. The fourth potential pathway is the growing of vegetables and herbs in soils that are contaminated.

The history of contamination

20. There is ample evidence that indicates that Nos 7, 9, 11 and possibly other sites at Nelson Parade Hunters Hill are heavily contaminated with radioactive waste. In particular, documents annexed to this submission numbered 2, 4, 6, 7, 10 and 14 identify the contamination.
21. The contamination was caused by the operations of the Radium Hill Company between 1911 and 1916. That company, long since deregistered, imported some 500 tonnes of uranium from Radium Hill in north east South Australia for processing. Radium Hill was Australia's first uranium mine.
22. The Radium Hill company processed the ore at Nelson Parade Hunters hill to extract high quality uranium oxide, including radium and lead. It is understood that the uranium oxide ore was transported overseas to France, apparently to Madam Curie who conducted breakthrough research into radioactivity.

23. It appears that ore tailings and other wastes were deposited onto the site and left there after the processing plant closed down in 1916.
24. The fact the site was contaminated with radioactive waste was known as early as 1965. Then the Radiation Branch of the Department of Health carried out an investigation. That investigation comprises document 1 in the annexure.
25. The report identified the contamination by said it was highly debatable whether the soil posed a real hazard to the occupants. It was proposed that cooperation of the four households be sought to remove certain areas of high activity soil under the direction of officers of the Radiation Branch.
26. The second major investigation occurred in 1977 which is contained in document No 2 in the annexure. Following this report, the Government acquired by agreement numbers 7, 9 and 11 Nelson Parade.
27. The next major investigation was the ANSTO report of 1987. That is contained in document No 4 in the annexure.
28. More recently, parts of the site have been formerly regulated. The foreshore area in front of No 7, 9 and 11 (Lot 1 DP 544937 and Lot 1 DP 641068) were declared in 2007 to be a remediation site by the Department of Environment and Climate Change (**DECC**) under s21 of the *Contaminated Land Management Act 1997*. These areas are under the care, control and management of the Department of Health.
29. In February 2008, the Department commissioned ANSTO to undertake a one day screening survey. Extracts of that report relating to No 11 are in document 13 of the annexure. The report identifies a number of hot spots above what is said to be the acceptable levels set by the ARPANSA. The report also states that No 11 is affected by contamination that exists on the adjacent property being No 9 Nelson Parade.
30. Notwithstanding these findings, the Department of Health and the Minister Assisting the Minister for Health (Cancer) the Hon Verity Firth appear to be claiming the site is within acceptable levels for human habitation. The evidence of this is contained in an answer to a question on notice, which was provided to Parliament on 16 May 2008:

Mr Michael Richardson to the Minister for Climate Change and the Environment, Minister for Women, Minister for Science and Medical Research, and Minister Assisting the Minister for Health (Cancer)—

(a) Are numbers 5, 11 and 13 Nelson Parade, Hunters Hill clear of radioactive contamination?

(b) If not, which block or blocks are contaminated?

Answer received on 16/05/2008

(a) It is my understanding that these blocks have been tested and the residents of these properties are aware of the results of testing on their sites. I am advised that, given current land use, the results fall within Australian Radiation Protection and Nuclear Safety Agency health guidelines.

(b) See answer (3) (a) above.

31. Similarly, an email from the Department of Health to Ben Cubby of the Sydney Morning Herald stated that the Department believed there to be no health concerns. The email is reproduced below.

From: Wayne GEDDES [mailto:WGEDD@doh.health.nsw.gov.au]
Sent: Friday, 11 April 2008 11:55 AM
To: Ben Cubby
Subject: Nelson Parade Hunters Hill

Ben,

The Health Minister's Office has asked that I respond to your questions.

The following can be attributed to a spokesperson for NSW Health.

Thanks.

A radiological survey was conducted by the Australian Nuclear Science and Technology Organisation (ANSTO) on properties adjoining NSW Health land in Nelson Parade at Hunters Hill on 20 February 2008.

Results of the testing undertaken at three sites have been provided to the individual property owners. An offer was made for NSW Health representatives to meet with these owners to discuss the results.

Overall, the results indicate that people living in Nelson Parade should have no health concerns. Exposure levels fall within ARPANSA (Australian Radiation Protection and Nuclear Safety Agency) recommendations for general public exposure.

Based on the ANSTO tests, there is no indication for further testing of other properties in Nelson Parade to be undertaken to assess immediate health risks.

| Wayne Geddes
| Director, Media and Communications
| voice 61 2 9391 9563 | fax 61 2 9391 9023 page 61 2 9966 7222
| wayne.geddes@doh.health.nsw.gov.au

32. As noted above, the February 2008 ANSTO survey did not consider the potential dose a person may receive from all sources, such as the inhalation of radon gas, radioactive dusts, the ingestion of particles. Nor did the ANSTO survey assess the actual level of radioactive material present in the soil.
33. It is nothing short of extraordinary that the Minister and the Department maintain the position that no health risks exist when the Department's own report states that it is not a comprehensive health risk assessment and did not measure a whole range of other sources of exposure to radiation.
34. As the Owners knew that the Department's ANSTO report was flawed, we requested the Department of Health to pay for a more detailed site investigation to

determine the extent of contamination of our clients Property. This request was refused, see document 18 in the annexure.

35. As a result, the Owners were forced to pay for their own independent testing of the Property. They commissioned one of Australia's leading experts in this field, Dr Joseph Young who is the principal of Australian Radiation Services Pty Ltd (**ARS**).
36. Document No 14 in the annexure is the report by ARS. That report confirms categorically the property is seriously contaminated and is unfit for long term human habitation without remediation. Members are strongly urged to read this report in detail. The key findings are set out above in paragraph 7.
37. The conclusions of the ARS Report are in stark contrast to the ANSTO report and the statements of the Minister and the Department of Health.
38. Furthermore, the Department has previously advised that the Property is clear of contamination. This occurred after the Department of Health sold No 11 in 1989 to private individual.
39. At the request of the then owner, the Department wrote to Hunters Hill Council on 24 August 1989 stating that:

"I refer to your recent approval of Development Application No 754/89.

The Department has been requested by the applicant to supply written confirmation to you that the subject land is free from radioactivity in accordance with your consent condition No. 4.

Following the removal of affected soil from the subject property known as 11 Nelson Parade, Hunters Hill, the Department has issued a clear Certificate under section 55 of the Public Health Act which indicates that the is considered clear of radioactive contamination".

40. That letter is document No 15 in the annexure.
41. The report by our clients' independent expert, Australian Radiation Services, confirms that the "removal of affected soil from the property" never occurred.
42. The Department of Health has proposed the remediation of No 7 and 9. The Department is preparing an application to the Department of Planning for approval of the works under Part 3A of the *Environmental Planning and Assessment Act* 1979. The proposal for remediation has yet to go on public exhibition.
43. At this stage, the Department is not proposing to remediate No 11 or any other property.

Key Questions for the Inquiry

44. We believe the Inquiry should examine and consider the following key questions:
 - (a) How is it that the Department of Health has permitted a situation to develop whereby this site has become the only site in Australia where houses sit on a radioactive waste dump in a suburban street in a capital city?

- (b) The Department has known about this dangerous waste dump since 1965. It received a comprehensive report saying it's a major health risk in 1977. The Government acquired lots 7, 9 and 11 for the purpose of cleaning up the site in 1978, 1980 and 1983. Why has the Department failed to carry out the clean up and knowingly exposed others to continuing high levels of radiation?
 - (c) After buying No 11 in 1980 because of the risks from the contamination, the Department of Health then sold No 11 in 1989 to a private individual. Why did the Department allow this to occur when only two years before it received a comprehensive ANSTO report confirming it was contaminated (see Document 4 in the annexure)?
 - (d) The Department of Health stated in a letter to Hunters Hill Council that No 11 was clear of contamination in 1989. That statement was false, misleading and deceptive. Why was such a letter issued?
 - (e) Between 1980 and 1989, why did the Department allow officers of the Department to live in No 11 and knowingly expose them to high levels of radiation?
 - (f) The report of GHD in 2002 (document 9 in the annexure) examines the appropriate clean up criteria for lots 7 and 9 and discusses the position of the Department of Environment, Conservation and Climate Change (DECC). The report notes that DECC adopts a clean up criteria that is far less stringent than what is applicable in the USA and in other jurisdictions. Their recommended clean up criteria is not supported by GHD. Why does DECC adopt such criteria in light of the easily available medical and expert evidence that it may not protect public health?
 - (g) Why did the Minister Assisting the Minister for Health (Cancer) and the Department of Health maintain the position that the February 2008 ANSTO report is sufficient to conclude that No 11 is safe and within ARPANSA recommended levels when the ANSTO report itself says it doesn't measure all sources of radiation?
 - (h) Why did the Department of Health refuse to pay for a more comprehensive study into No 11 when it knew its own study was not comprehensive?
 - (i) Why has not the Department agreed to put Mr and Mrs Vassiliou back into the position they would have been had the Department done the right thing?
45. We urge the Inquiry to examine into and report on the above matters. We are of the opinion that the Inquiry should make a call for papers from the Department of Health and DECC to obtain answers to these questions. We understand these agencies are currently refusing to provide all of the relevant documents under the Freedom of Information Act citing the volume, time and cost involved. We believe that the Department of Health has been less than open and accountable in this matter and the Inquiry should therefore examine all of their files.
46. We further urge the Inquiry to make strong recommendations that the Department of Health take immediate action to ensure the thorough remediation of all the affected land at Nelson Road Hunters Hill, including No 11. This issue has gone

unresolved for long enough and the residents should be given a street that is safe and clean to everyone.

47. In relation to our clients, Mr and Mrs Vassiliou, they have suffered greatly from the actions and inactions of the Department. We strongly urge the Inquiry to recommend that the Department of Health place them back into the position they would have been had the Department not allowed this situation to develop. That is, the Department should:
- (a) acquire No 11 from the Owners for its full market value unaffected by contamination plus associated disturbance costs (within the meaning of the Land Acquisition (Just Terms Compensation) Act 1991);
 - (b) include No 11 in the proposed remediation of the Nelson Road site so no one else is exposed to further harmful radiation;
 - (c) reimburse the Owners for all of their costs and expenses associated with this contamination issue to date including costs thrown away relating to their proposed renovation which now cannot proceed; and
 - (d) pay an amount for the stress, hurt and anxiety this issue has caused them.