Standing Committee On Foreign Affairs, Defence And Trade Inquiry into the Australian Participants in British Nuclear Tests (Treatment) Bill 2006 Email: fadt.sen@aph.gov.au]fadt.sen@aph.gov.au

Dear Sir or Madam,

A Submission to the Standing Committee On Foreign Affairs, Defence And Trade Inquiry into the Australian Participants in British Nuclear Tests (Treatment) Bill 2006. By Paul Langley,

Port Willunga SA 5173, former Royal Australian Electrical and Mechanical Engineers (RAEME) Storeman Technical Clerk Radiological Safety NCO, 4 Base Workshop RAEME Bandiana Vic, Radiac Centre, 1971-1973. Army Number 45942. Exposed to Ionising Radiation in the course of duties.

NB: PART 1 OF 3

The "Commonwealth of Australia Parliamentary Debates HOUSE OF REPRESENTATIVES Official Hansard, TUESDAY, 10 AUGUST 1999, THIRTY-NINTH PARLIAMENT FIRST SESSION—FOURTH PERIOD BY AUTHORITY OF THE HOUSE OF REPRESENTATIVES, CANBERRA" records the following statements and promises to include Indigenous Australians in the Health Survey:

"Kaldor, Professor John: Expert Report (Question No. 764)

Mr Laurie Ferguson asked the Minister Assisting the Minister for Defence, upon notice, on 22 June 1999:

Has he received an expert report by Professor John Kaldor reviewing the methodology used by the Scotland-based Australian researcher Sue Rabbitt Roff on the health of British and New Zealand nuclear veterans and their families; if so, (a) on what date, (b) has Ms Rabbitt Roff been provided with a copy and given a chance to respond; if not, why not, (c) what was the cost of the report, (d) are copies available to the public; if not, why not, and (e) has he accepted Professor Kaldor's recommendations; if so, will he provide details of further action to be taken to address the situation of Australian military and civilian personnel who participated in British nuclear tests in Australia.

Mr Bruce Scott—The answer to the honourable member's question is as follows: Yes.

(a) Thursday 15 July 1999.

(b) Professor Kaldor had discussions with Ms Rabbitt Roff during the preparation of his report. A copy of his report will be provided to Ms Rabbitt Roff. She may choose to comment.

(c) Professor Kaldor is still to submit his account.

(d) Yes.

(e) I have announced the compilation of a nominal roll of ex-service personnel involved in the testing and also civilians, aborigines and pastoralists, for whom information is available. This nominal roll will be used to conduct mortality and cancer incidence studies of Australians involved in the UK nuclear tests. This will enable the Government to determine if current compensation and assessment arrangements are sufficient." End quote. Emphasis added.

The failure of the Australian Government to include Aborigines and pastoralists in the survey as promised is a glaring omission and when questioned the Minister responsible provided the following information in an email response to me:

"The Hon Bruce Billson MP

Minister for Veterans' Affairs Minister Assisting the Minister for Defence Federal Member for Dunkley

Mr Paul Langley paulieremylangley@ yahoo .com.au Dear Mr Langley Thank you for your emails of 2,9 and 10 March 2006 concerning the Australian Participants in the British Nuclear Test Programme - Cancer Incidence and Mortality Study.

The Federal Government recognises the concerns of Australian Defence Force participants in the UK atomic test program, particularly those who witnessed the explosions at Monte Bello Islands, Emu Field and Maralinga between 1952 and 1957.

My Department and the Department of Defence have taken the lead on a study into the death rate and incidence of cancer in former participants of the British Atomic Testing, called the *Australian Participants in the British Nuclear Test Programme - Cancer Incidence and Mortality Study.* The study has involved staff from a number of other Departments, and independent experts have conducted analyses of the data collected.

The study has also involved close consultation with a Consultative Forum comprising representatives of the veteran community, including atomic test participants. An independent Scientific Advisory Committee, and a Dosimetry Subcommittee and Exposure Panel have advised on technical aspects of the study.

This study is now approaching completion, and will produce two reports on the areas of Dosimetry and Mortality and Cancer Incidence. Final clearance for the study reports has been obtained from the study's Scientific Advisory Committee.

As such, the reports will soon be presented to the Government, which will consider its response to the study.

While the Australian Government recognises the effect of the atomic tests on Indigenous Australians, having extended compensation eligibility to them under the *Compensation (Commonwealth Government Employees) Act 1971,* Indigenous Australians have not been included in the current study.

Indigenous Australians were excluded from the study because there is no available list of Indigenous Australians who were present in the areas of the tests at the time. In the 1950s and 1960s the indigenous population was not counted in the census and there were no records kept of Indigenous Australians who lived in the test areas.

However, I assure you that all reasonable steps were taken to include in the study all relevant aspects of Indigenous people's experience of the atomic tests. Thank you for taking the time to write to me with your concerns. Yours sincerely

Signed Billson MP Minister for Veterans Affairs

Parliament House, Canberra ACT 2600 Tel: (02) 6277 7820 Fax: (02) 6273 4140 <u>b.billson.mp@aph.gov.au</u>" End quote

The assertion that "Indigenous Australians were excluded from the study because there is no available list of Indigenous people who were present in the areas of tests at the time" is open to critical questioning. Firstly there is a wealth of published material dealing with Indigenous Australian individuals and groups affected by the testing of atomic weapons in Australia. A partial list includes the "<u>McClelland Royal Commission</u>", Commonwealth of Australia, (short title), which records testimony of affected people and provides maps of fallout over Indigenous living space. "I'm the One that Know this Country

<u>. The Story of Jessie Lennon and Coober Pedy</u>" by Jessie Lennon, Compiled by Michele Madigan, ISBN 0 85575 351 X, Aboriginal Studies Press for AIATSIS, the writings of and about Yami Lester -

http://www.aboriginaleducation.sa.edu.au/pages/Learners/Yami_Lester/, Yami's book, ISBN 1 86465 025 Yami: <u>The autobiography of Yami Lester.</u> The publications in the form of Video, internet and a book of the Irati Wanti Campaign, eg <u>http://www.iratiwanti.org/home.php3</u>.

Press reports such as <u>The Adelaide Advertiser of Monday May 12 1980</u>, <u>front page, "A – Test Mist "may" have killed 50"</u> by Robert Ball and Peter de Jonno, citing Dr T. M. Cutter.

State and Federal Hansard records such as:

I020 COMMONWEALTH PARLIAMENTARY HANSARD REPRESENTATIVES 20 MARCH 1980 Mr UREN (Reid) (12.35) - Health inquiry(Question No. 921) Mr Uren

Question No. 3515 Mr Uren Health of Australia's nuclear veterans Question No. 2746 Health of US Servicemen

2186 SENATE 14 MAY 1980 QUESTIONS WITHOUT NOTICE MARALINGA ATOMIC TESTS Senator ELSTOB - inquiry into deaths of Aboriginals 2288 SENATE 15 MAY 1980 MARALINGA NUCLEAR TESTS MINISTERIAL

STATEMENT Senator CARRICK (New South Wales - Minister for National Development and Energy) - by leave - Inquiry into deaths of Aboriginals Senator CAVANAGH (South Australia) (12.56pm)- Cancer etc among victims of tests, the Marston report, Rocky Flats, USA experience

2480 REPRESENTATIVES 30 APRIL 1980 Emu Atomic Weapons Test Site {Question No 5895) - IRAC report

2846 REPRESENTATIVES 15 May 1980 NUCLEAR TESTS Mr MacKELLAR (Warringah - Minister for Health) - Radiation exposure

3220 REPRESENTATIVES 22 May 1980 ATOMIC WEAPONS TESTS IN SOUTH AUSTRALIA (Question No 5785) - Health effects and compensation ANSWERS TO QUESTIONS 22 MAY 1980 REPRESENTATIVES ABORIGINES AT MARALINGA : EXPOSURE TO RADIATION (QUESTION NO 5782) ATOMIC WEAPONS TESTS AT MARALINGA AND EMU (QUESTION NO. 5783) Maralinga workers

OPERATION BRUMBY AT MARALINGA QUESTION NO 5784 - Australian personnel involved

ABORIGINES AT MARALINGA : EXPOSURE TO RADIATION (QUESTION NO. 5786)Contamination of Aboriginal people at Maralinga.

This list is cursory.

<u>The records of the South Australian Department of Human Services</u>, whose precursor, the SA Health Commission, received requests for information relating to Dr Cutter's knowledge of harm to Indigenous Australians from the A-Tests (as

reported by the Advertiser of 12 May 1980) from Federal Senator Chaney (then Minister for Aboriginal Affairs), these records consist of documents from Sen. Chaney, operational documents fulfilling the request, and documents of communication to Sen. Chaney. Federal Hansard fails to record any outcome.

<u>A letter to me from Mr Jim Dadds, FOI Officer, document numbers 99/03212,</u> <u>00299/0347</u> which denies me access to these documents. The letter is dated 27 September 1999.

<u>Australian National Archives search keyword "RADIAC"</u> for files relating to the use of atomic weapon radioactive fallout measuring instruments, their use in the field and their development and service records,

Email to me from Australian National Archives dated 30/7/02 11:33 am re Photocopy request for item AWM 207 981/F42/12HQ ANZUK FORCE RADIAC EQUIPMENT quote " unfortunately this file does not contain any pages. This file was received by the War Memorial in this condition. If you have any further questions please do not hesitate to contact me or (deleted) on (02) 6243 4587, Thank you (deleted) Research Support Officer Australian War Memorial." End quote Instructive as how the military / political complex suppresses information.

<u>ARPANSA Records</u>. The hearings in Adelaide regarding the proposed siting of a National Radioactive Waste Repository adjacent to Coober Pedy. The testimony of A Test survivors and their kin was recorded by ARPANSA. In the presence of representatives and members of the Parliament of the Commonwealth of Australia.

"Through the Smoke", thesis, University of Melbourne, by Eve Vincent

<u>"Maralinga Chronology The Atomic Weapons Tests in Australia and Their</u> <u>Radiological Impact</u> ISBN 0-646-42490-4, ebook, by Paul Langley

<u>State Library of South Australia</u> "The bombs & beyond [electronic resource] : a display for the SA Museum" / by Paul Langley ; music by David Langley

<u>"Report of the Select Committee Appointed to Inquire into Native Welfare</u> <u>Conditions in the Laverton – Warburton Area Presented by Mr. W.L. Grayden on</u> <u>12th December, 1956, First Session of the twenty – Second Parliament</u>" Western Australia.

Provenance Notes and dialogue by Jack Horner, for the film "Warburton Range Film 1957" AIATSIS.

Warburton Range Film 1957 by William Grayden with Pastor Doug Nicholls, late Governor of South Australia. AIATSIS

<u>The US Department of Energy Human Radiation Experiments Website</u>, ordered by President Clinton. Search database using the keywords "Emu", "Totem", "Indigneous Australian" all registered dozens of finds. This site has been ordered shut and truncated by President Bush.

<u>The testimony of USAF B29 bomber aircraft flight crew who chased the clouds</u> <u>created by the Totem Atomic bombs at Emu Field South Australia 1953.</u> No attempt has been made to make available the debrief session notes of these sorties.

"Back to the Blast", Composite Films, 1982.

(This film shows Beta Radiation burns suffered by an Indigenous person.)

I submit the evidence shows that sufficient information exists relating to Indigenous Australians affected by the Atomic Bombs to enable their inclusion for consideration in the current matter. Their exclusion is a breach of their rights as Australians and is a form of defacto apartness enforced by a government in possession of the facts. Many of these facts are unpalatable and consist of matters which at the time of the tests related to National Security. This is because the diet and lifestyle of Indigenous Australians approximated that of many of the populations of the Soviet Union. In particular the dietary uptake of Calcium and radio Strontium of Indigenous people compared to White populations rendered Indigenous populations more vulnerable. Source: Report on Project Gabriel, US Atomic Commission Division of Biology and Medicine Washington DC July 1954, author censored, declassified 1987.

No study of the Australian Indigenous diet has ever been undertaken in the context of Radiological Safety. In contrast, the White Australian diet was studied from this perspective from 1953 to 1973.

Part 2 of this submission will study this aspect of official ignorance, Part 3 of this submission will deal with the misdiagnosis of Beta Radiation Burns (caused by Strontium 89, a high energy Beta emitter of short half life) suffered by Indigenous Australians and which is of an order of harm many times greater than that suffered by the Marshallese.

Paul Langley 25/10/06

Standing Committee On Foreign Affairs, Defence And Trade Inquiry into the Australian Participants in British Nuclear Tests (Treatment) Bill 2006 Email: fadt.sen@aph.gov.au]fadt.sen@aph.gov.au

Dear Sir or Madam,

NB: PART 2 OF 3

A Submission to the Standing Committee On Foreign Affairs, Defence And Trade Inquiry into the Australian Participants in British Nuclear Tests (Treatment) Bill 2006. By Paul Langley, Port Willunga SA 5173, former Royal Australian Electrical and Mechanical Engineers (RAEME) Storeman Technical Clerk Radiological Safety NCO, 4 Base Workshop RAEME Bandiana Vic, Radiac Centre, 1971-1973. Army Number 45942. Exposed to Ionising Radiation in the course of duties.

"Indigenous Australians were excluded from the study because there is no available list of Indigenous Australians who were present in the areas of the tests at the time. In the 1950s and 1960s the indigenous population was not counted in the census and there were no records kept of Indigenous Australians who lived in the test areas." : Billson MP Minister for Veterans Affairs, email to me, March 2006.

The Minister not only raises the issue of the availability of information relating to Indigenous people. In addition he raises the concepts being "present in the areas of the tests", "time", and "living in the test areas."

In order to determine who was present in the test areas, how time impacts upon the radiological safety of these people and the manner in which they lived, including all aspects of lifestyle, most importantly infrastructure and diet, we need to define the terms.

Concept One – "Test Area".

The very first test, Hurricane, produced fallout clouds which traversed the north of Australia. Royal New Zealand Air Force aircraft tracked these clouds to Fiji. (Source: "The McClelland Royal Commission")

Is Fiji to be included in the "Test Area"?

The official view seems to be that the test areas relating to the atomic blasts consists only of those areas officially designated as such and sign posted as such (but only in English) at the time. This is not the view of many people who were affected by the tests. In fact,

William Grayden MP reported in 1956 that the WA government was considering moving Indigenous children in the Laverton – Warburton Range area further westward for their welfare. This would have meant separating the children from their families. It wasn't undertaken. However, Grayden surmised that the effects fallout (recorded as it was by the nearby Giles Atomic Test Weather and Fallout monitoring station) upon these children was one of the motivators behind the consideration of the idea.

The Australian Atomic Weapons Test Safety Committee did produce nine fallout maps. These maps were produced by the 28 monitoring stations laying out strips of sticky paper in the open. Radioactive fallout landing on the sticky paper was, after a period of handling, transport and time, measured and the maps produced. These nine maps can be found within the body of the "McClelland Royal Commission" report.

There are four issues which come out of the production and presentation of thes maps.

- 1. There were 12 atomic bomb tests, not nine, so we are lacking fallout maps for the Hurricane, Totem 1 and Totem 2 tests. This is a careless oversight given the controversy which still surrounds the Black Mist Incident. (A controversy which does not exist in the minds of those who witnessed the deaths and illnesses).
- 2. The maps clearly show fallout was deposited outside the designated "test areas".
- 3. The 1954 "Report on Project Gabriel" by the US Atomic energy Commission Division of Biology and Medicine Washington DC, states that : " The objective of Project Gabriel is to evaluate the radiological hazard from the fallout of debris from nuclear detonations in warfare. Comparisons have been made between total debris production and total fallout from test site survey world wide gummed (or sticky) paper collections. The gummed paper is here assumed to have an accuracy of 100%, although it is probably less than 50%." End quote. Australia used the same fallout method. The maps were produced on the assumption that the gummed or sticky paper was 100% accurate. In fact, the method under reads by 50%. We need to double the dose. The reason for the inaccuracy is the small size of the fallout particles rendered the gum or stickiness of the paper inadequate and the effect of wind, rain and handling, plus the delay in reading the paper (which involved the time in transporting the paper strips to the Eastern states) meant short lived isotopes decayed prior to reading. Although this decay could be factored in, the inadequacy of the retention method (gum) meant the fallout particles fell off.
- 4. The maps are presented as nine discrete entities, which exist without reference to each other. From the point of view of the nuclear scientist, this may be OK. From the point of view of the biologist or medical doctor, it ignores the fact of bio accumulation. For humans, all exposures to ionizing radiation are additive. This gives rise to the concept of the Allowable life time dose. So, from the point of view of people who were subject to fallout from all of the bombs, we can simply add them up to see those areas of high fallout bioaccumulation and repeated exposure dose. The easiest way to do this is to print the nine maps onto transparent sheets and overlay them. The result is as follows:



This map is a contrast map showing areas of repeated dosing of radioactive fallout. It is not a calibrated map, It does not take into account the effect of decay between bombings. But neither does the Allowable Lifetime Dose as prescribed by the IAEA. The biological effect of exposure is permanent and cumulative. The different approaches to this matter by nuclear scientists and biologists and doctors explains the unending tension between the nukers and the health professionals.

Importantly, it shows that the effects of the tests ranged far beyond the designated "test areas", includes Indigenous land, people, and food and explains at a glance why Indigenous people were so vulnerable: They ate soley local food, which had minimal processing such as peeling or washing. Indigenous people had no drains or laundry facilities so any removed contamination was not moved off site. In fact, the military's poison was blown and washed onto Indigenous people. Indigenous people wore little clothing, none of protective value, didn't change clothes daily, couldn't shower daily and didn't live and work in hard, sealed buildings.

In contrast Prof Penney's aluminium caravan at Maralinga was steam cleaned daily while his personnel largely lived in tents and were sprayed with DDT.

I submit the whole of Australia was part of the test area and scientific studies of the White Australian diet, from Perth to Cairns, over many decades, bear this out. Sources which give the results of the radiological monitoring of foodstuffs comprising the White Australian diet include:

Atomic Weapons Test Safety Committee Report Number 2, Strontium 90 and Caesium 137 in the Australian Environment during 1969 and some results for 1970.

"The Australian Journal of Science, Vol 24, Number 10, April 1962, "Strontium 90 in the Australian Environment, 1957 to 1960".

<u>Australian Radiation Laboratory Report "Public Health Impact of Fallout from</u> <u>British Nuclear Weapons Tests in Australia, 1952 - 1957" by Keith N. Wise and John R.</u> <u>Moroney, published by the Department of Health, Housing and Community Services.</u>

But no study of the Indigenous diet was ever carried out by Australian authorities. In fact the publication "Public Health Impact of Fallout from British Nuclear Weapons Tests in Australia, 1952-1957", by Keith N. Wise and John R. Moroney, Australian Radiatin Laboratory, Commonwealth of Australia, ARL/TR105, ISSN 0157-1400, May 1992, states the following on page 2 :

"Two population groups are excluded from the (Exposure Dose) calculations. They are the Aboriginals living away from population centres and the personnel involved directly in nuclear test activities. Otherwise the total population is represented in the estimated radiation doses". End quote.

It is therefore little wonder that the Minister wrote me "<u>Indigenous Australians</u> were excluded from the study because there is no available list of Indigenous Australians who were present in the areas of the tests at the time. In the 1950s and 1960s the indigenous population was not counted in the census and there were no records kept of Indigenous Australians who lived in the test areas."

He is merely carrying on a tradition of non disclosure commenced in 1952.

What would he find if Indigenous people were included?

<u>The Movement of Calcium and Strontium Across Biological</u> <u>Membranes" - Proceedings from a Conference held at Cornell</u> <u>University, Ithaca, New York, May 13-16, 1962, Academic</u> <u>Press</u>

This important publication examines the means by which Radio Strontium infiltrates the human body. In this publication Comar writes of the "English Diet" consisting of calcium enriched food such dairy milk (which by virtue of lactose, enhances calcium absorption), of the body's discrimination ratio in favour of Calcium over Strontium and of the protective effect of the dairy cow's udder in also favoring calcium over Strontium.

If one has a diet lower in calcium concentration and devoid of lactose, in an environment of incoming atomic fallout, one WILL absorb more radio strontium than the people enjoying a calcium enriched diet.

For example:



These facts show that Indigenous Australians have repeatedly been ignored when publically released health surveys and radiological safety data have been released.

Unlike the White diet or "English Diet" (as it is officially called in august publications), the Indigenous Australian diet has never been publically studied from a radiological safety perspective. In science, that is a call for more research, more inclusion. In Australian politics, it is the basis for a Minister of the Crown to state to me: "Indigenous Australians were excluded because there was no available list" or data. It is time the list and data were either released or created.

No knowing is not a basis for exclusion from study. The converse is true. For every bomb detonated in the atmosphere during the Cold War, it was the Calcium dilute diet which caused the greatest bio accumulation of radio Strontium. Australia's Indigenous people suffered disproportionately and should not be ignored again. Part 3, the final part, of my submission follows. Paul Langley 25/10/06

Standing Committee On Foreign Affairs, Defence And Trade Inquiry into the Australian Participants in British Nuclear Tests (Treatment) Bill 2006 Email: fadt.sen@aph.gov.au]fadt.sen@aph.gov.au

Dear Sir or Madam,

NB: PART 3 OF 3

A Submission to the Standing Committee On Foreign Affairs, Defence And Trade Inquiry into the Australian Participants in British Nuclear Tests (Treatment) Bill 2006. By Paul Langley, Port Willunga SA 5173, former Royal Australian Electrical and Mechanical Engineers (RAEME) Storeman Technical Clerk Radiological Safety NCO, 4 Base Workshop RAEME Bandiana Vic, Radiac Centre, 1971-1973. Army Number 45942. Exposed to Ionising Radiation in the course of duties.

ACTUAL HARMS SUFFERED BY INDIGENOUS PEOPLE

Much has been made of Project Sunshine and Strontium 90. That Strontium 90 in dairy milk was the main contributor to the White Australian radiological exposure dose.

But in comparison, those without dairy were worse off:

"The main contributors of Sr90 in the former Soviet diet were cereals and whole grain (UNSCEAR 1977). Milk and milk products are the major contributors of Sr90 in western countries. Other food products that may contain Sr90 include fruits, vegetables (carrots, cabbage, potatoes), meat eggs, spices, and seafood.

The National Academy of Sciences, in 1973, stated, in "Radionuclides in Food", that "Although Dairy products represented 58 percent of the dietary calcium, they provide less radiostrontium per gram of calcium than did any of the other items. If an attempt is made to reduce radiostrontium intake by eliminating milk from the diet and increasing the vegetable portion to make up the deficit of calcium, the resulting intake of Sr90 is greater than that from the diet containing the milk products". (Source: US Nuclear Information Centre, citing the US National Institute of Health, 2004)

This understanding is crucial in order to appreciate the predicament of Indigenopus populations. While we Anglos and Euros complain about the Strontium in the milk of the era, Indigenous Australians were WORSE OFF BECAUSE THEY DIDN'T TOTE DAIRY COWS WITH THEM AND GOATS MILK IS FAR WORSE. MISSION STATIONS PROVIDED GOATS MILK (Sources: Jack Horners notes to the Warburton Range film, 1957, the US DOE HREX site, oral history section. Dr Goldman on the harms of goats milk).

Additional Sr89 contamination of "close in" Indigneous land in Australia eg Wallatinna, Mable Creek etc worsens the Indigneous situations compared to urban populations.

There are two types of Radio Strontium created by atomic bombs.

Strontium 89 and Strontium 90. Stontium 89 is a potent emitter of a high energy Beta radiation. It is short lived. (days). It is produced in much greater quantities (esp in Curies) than Strontium90 when an atomic bomb is detonated. Strontium 90 is an emitter of soft low energy Beta radiation. It is long lived. All the Strontium 89 created by the British bombs in Australia has decayed to stable Zirconium. The Strontium 90 will be around until about 2016.

Project Sunshine studied LONG TERM HAZARDS not short term hazards.

For the people alive at the time of the tests, it was the IMMEDIATE HAZARDS which produced immediate health effects. These have never been publically studied, as the immediate hazards are TACTICALLY SIGNIFICANT and hence are militarily important. Strontium 89 will knock out troops. Strontium 90 is far less likely to on its own. The following chart gives a clue via the delivered dose:



US map (US DOE) showing the proportions of isotopes in fallout. Compare Strontium 89 to Strontium 90. Note: Atmospheric testing ceased in 1963.

The situation was worse for Indigenous people. They not only got the fallout in their food, they got in on their skin and hair.

The SA Museum will confirm photos of an Indigenous lady who, as a young girl, went to sleep on the ground after witnessing a Totem atomic blast. The photos, taken by Michele Madigan, show the lady's breast and areas of her arm are depigmented. The photos were taken in the 90s. The lady woke up the day after the bomb detonation with her breast and arm turned white. This is Beta Radiation Burn. Also known as Local radiation injury. The IAEA has a set procedure for diagnosis and treatment, and the information sheets include photos. From the damage to skin, an exposure dose can be calculated.

Jessie Lennon in her book "I'm the one that Know this Country" writes about the appearance of the Black Mist. She states: "It started to look hazy... <u>Smoke and bluish smoke .</u>"

Jessie noted two types of smoke present in the Black Mist, and it is a common observation amongst Indigenous people who witnessed the Black Mist.

Turning again to the US "Report on Project Gabriel" we find on pages 4 and 5 the concept of Fractionalisation. The various components created by the atomic blast as gaseous and molten material condense out and form solids at differing rates. It doesn't all solidify at once. And so the smoke formed by the differing condensed particles is of at least two types.

This is confirmed by observations made during the US Operation Sandstone:

3351 -- OPERATION SANDSTONE RADIATION INJURIES (ENCL: EXHIBITS A - P, RE SAME, DTD 5/17 - 8/17/48) 03/31/2006 10:20 AM http://www.fas.org/sgp/othergov/doe/lanl/doe_marshall_isl/3351_.html Page 1 of 2 **OPERATION SANDSTONE RADIATION INJURIES (ENCL: EXHIBITS** A - P, RE SAME, **DTD 5/17 - 8/17/48**) Local PDF: 3351 .pdf **Remote PDF:** http://worf.eh.doe.gov/data/ihp2/3351_.pdf Author: CLARK J C **Document Date:** 07/27/48 **Pages:** 0048 Document Number: 0403351 **Document Type:** RT Location: ENEWETAK ATOLL, PACIFIC PROVING GROUNDS, MARSHALL ISLANDS **Subject Area: MEDICAL MATTERS Kijiner Code:** Keywords: GAMMA RADIATION, ZEBRA EVENT, RADIOLOGICAL PERSONNEL, RADIATION MONITORING, RECOMMENDATIONS, PHOTOGRAPHIC FILM DOSEMETERS, MEDICAL SURVEILLANCE, RADIATION DOSES, PERSONNEL DOSIMETRY, SANDSTONE OPERATION,

PROCEDURES, BETA LESIONS, PROTECTIVE CLOTHING, YOKE Original Doc Number: Source Agency: LASL

www.fas.org/sgp/othergov/ doe/lanl/doe_marshall_isl/3351_.html - 2k -

US military personnel suffer Beta Radiation burns and observe two types of fractionalized condensate from a nuclear blast. They are rushed to Los Alamos hospital for specialized treatment and are banned from contact with ionizing radiation for the rest of their careers.

This is in remarkable agreement with Jessie Lennon's observations. She lost family members, a baby and a son. The hospital refused to give a cause of death.

Early this year, Michele Madigan interviewed another Indigenous lady who witnessed the Black Mist. The lady experienced skin burns which did not heal. Later these skin burns were diagnosed as psoriasis. Her son suffers in the same way (he witnessed the blast and black mist also). They have been given powerful and toxic medicine, the son has to bath regularly in a tar based treatment.

This is a common story. Skin conditions diagnosed as anything but Beta Radiation Burns, even though the circumstances in which they arose indicate radiation may be a cause.

As the IAEA states, "Radiation must be considered".

One would not expect an untrained person, out to gather opals and rabbits as one able to concoct a story about fallout smoke which includes an observation consistent with Fractionalisation. But a scholarly article written by a former Maralinga Range Safety Officer casts doubts upon the Indigenous experience of the bombs. And that is handy for the government. That author fails to consider just how in conformity with trained observation the Indigenous witnesses were at the time. They saw a fractionalized set of atomic fallout clouds at ground level, the same clouds both the USAF and the RAAF admit to loosing track of.

In any event the only difference between Jessie's experience and the US Operation Sandstone military Beta burn victims is the trip to Los Alamos Hospital and the complete lack of radiological health after care. Instead Indigenous people received and receive denial and exclusion.

What should have happened to the victims of the Black Mist and other victims suffering Beta radiation burns from the use of atomic bombs in Australia is contained in the IAEA publication "Diagnosis and Treatment of Local Radiation Injuries, Module XIII". This is available at :

www-pub.iaea.org/MTCD/publications/PDF/eprmedt/Day_3/Day_3-10.pps

In considering a new radiological health survey of the USA, in 2003 the American CDC stated the following : "Although a large number of summary reports related to nuclear weapons fallout have been published, many of the primary documents upon which these summary reports are based will be lost forever if they are not protected soon." And: "The Need for Original Data: In over ten years of dose reconstructions the Centre for Disease Control and Prevention (CDC) has always tried to locate and use original data....If there is ever going to be a study of the health effects of all nuclear weapons tests using original data the information collection phase must be done soon." (App D 1, "Report on the Feasibility of a study of the Health Consequences to the American Population from Nuclear Weapons Tests conducted by the United States **AND OTHER NATIONS**")

Its about time Australia started cooperating with the United States of America in its search for original data.

Every Indigenous Australian who suffered Beta radiation burns from atomic fallout bears a biometric dose rate marker of immeasurable value and knowledge potential on their skin.

Dose rates need not be reconstructed but observed.

Such observations will contradict official dose rate estimates.

Affected Indigenous Australians are passing away and they are an immense loss to the nation and the world, as unique people and as people who bear witness to the truth of events in both their souls and their bodies.

What *is* the Australian Government waiting for? We cant have an accurate history taught to future generations if the original data isn't gathered. The truth should be gathered and presented in the open, not buried.

Paul Langley 25/10/06 Final