



Gulf Veterans' Illnesses Unit
MINISTRY OF DEFENCE
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Our Reference:

D/GVIU/7/1/8/2

Date:

23rd August 2002

**MINUTES OF THE FIFTH DEPLETED URANIUM SCREENING
 PROGRAMME OVERSIGHT BOARD MEETING ON 17th June 2002**

Present:			
Board:	Professor David Coggon Surg. Cdre Nick Baldock Mr Ray Bristow Mr Ron Brown Dr Chris Busby Dr Peter van Calsteren Dr George Etherington for Frances Fry Professor Malcolm Hooper Dr Muir Gray Miss Beverley Green Dr Len Levy Dr Gordon Paterson Dr Margaret Spittle GVIU Representative	MRC INM NGV&FA DRPS LLRC OU NRPB GVA NSC RBL MRC IEH BRC MH GVIU	Chair Secretary
Observers:	Air Cdre Simon Dougherty Mr Alan Duncan Mr Neville Higham Dr Steven Laitnor Mrs Brigid Rodgers Ms Rosie Wane	SGD HJA HSE NSC GVIU GVIU	
Apologies:	Mr Ivor Connolly Professor Nick Day Miss Frances Fry Professor Ian Gilmore Dr David Lewis Professor Brian Spratt Dr Hilary Walker	NGV&FA IPH NRPB RBL INM RS DH	

Item	Discussion and Decisions	Actions (Action date)
1.	<p><u>Introduction</u></p> <p>a) New attenders were welcomed and introduced.</p> <p>b) The Chairman stated that the main aims of this meeting were to:</p> <ul style="list-style-type: none"> • Review the progress of the pilot exercise • Progress arrangements for the main testing contract • Develop plans for sample collection. 	
2.	<p><u>Minutes of last meeting</u></p> <p>a) A number of minor changes to the minutes of the last meeting were agreed. These were then accepted as a true record of the meeting.</p> <p>Post meeting note: Amended minutes sent to DUOB members by email on 19th June 2002.</p>	
3.	<p><u>Matters arising from last meeting</u></p> <p>a) A full list of actions arising from previous meetings and their current status is attached at Annex A.</p> <p>b) The Secretary gave an update on progress with the DUOB website. The layout and content of the website had now been improved, apart from the CVs of DUOB members which need editing to a standard format.</p> <p>c) Some members who had not been present at the last meeting noted that they had still not received a copy of the Royal Society Part II report. The Secretary undertook to distribute copies to the relevant people.</p> <p>Post meeting note: Reports sent out on 18th June 2002.</p> <p>d) Ray Bristow expressed concern that the minutes of the last meeting did not represent the true flow of the meeting. In particular, he felt that a discussion regarding the Royal Society report part II was not allowed to develop by the Chairman. The Chairman accepted this point and stated that the main aim of the DUOB was to implement the DU testing programme. In his role as Chairman of the DUOB it was his duty to ensure that the testing programme is implemented quickly to satisfy the needs of those veterans who require a test. He had therefore curtailed the discussion to enable the main work of the DUOB to proceed.</p> <p>e) Several members voiced concern over the conclusions of the RS report. The Chairman stated that if further discussion of the RS report were required it could be added to the agenda of a future meeting, for discussion after the main business of the DUOB on that day had been completed.</p> <p>f) The Secretary said that he had not yet circulated the McDiarmid article on spot urine samples as he was awaiting permission to distribute the document. Ron Brown noted an apparent difference in exposures to naturally occurring uranium between the UK and the US, which would need to be taken into account when interpreting the findings.</p> <p>g) There was a short discussion regarding the methods by which the testing programme would be publicised. Muir Gray stated that he had knowledge of</p>	

	<p>DISCERN, a systematic process of appraising public and patient information sheets, that may be of use in this matter. Suggestions for advertising the availability of the testing programme included:</p> <ul style="list-style-type: none"> • Gulf Veterans Association website • National Gulf Veterans and Families Association website and newsletter • Royal British Legion website and newsletter • MOD website • NGO websites <p>h) The Chairman reported that he had talked to a third research organisation about the possibility of case-control studies (Action 4.16) and they wished to be included in any invitation to submit proposals. He had therefore suggested that the MRC invite initial proposals from three organisations.</p> <p>i) Chris Busby brought up the subject of the Italian peacekeeper data which had been discussed at a number of previous meetings. The discussion had continued by email, but a number of Board members did not have the full correspondence. The Secretary undertook to collate all discussion on this topic and distribute it to Board members. Chris Busby undertook to write a small introduction to the topic.</p> <p><u>Action 5.1. Secretary to collate and distribute all information regarding Italian peacekeepers discussion</u></p> <p><u>Action 5.2. Chris Busby to write a short introduction to the Italian Peacekeepers information</u></p> <p>j) Malcolm Hooper questioned the post meeting note in the minutes of the 4th DUOB meeting stating that two cases of renal cancer had been detected at the MAP using ultrasound. The Secretary undertook to check this.</p> <p><u>Action 5.2. Secretary to check on ultrasound diagnoses of renal cancer at MAP</u></p> <p>k) Brigid Rodgers reported on developments following Ray Bristow's suggestion at the last meeting that the results of the recent NGVFA urine tests could be made available to the DUOB if the MOD were prepared to provide a control group for the chromosome aberration work being carried out by Dr Schott. She stated that the MOD does not enter into 'deals'. Any request for assistance with research would be considered on its own merits. Professor Schott had written to the MOD twice now, but he had not provided a protocol for his study. The Chairman stated that it was normal practice for research institutions to submit a protocol when requesting assistance with studies. Brigid Rodgers stated that she had replied to the first letter on behalf of the Minister, stating that, based on the limited information supplied by Dr Schott, the MOD would not be prepared to consider the proposal. MOD is considering its reply to the second letter.</p>	<p>Secretary (24/7/02)</p> <p>Chris Busby (24/7/02)</p> <p>Secretary (24/7/02)</p>
4.	<p><u>Update on Pilot Exercise</u></p> <p>a) The Secretary stated that he had talked to the laboratory that had proposed carrying out testing using AMS and ICPMS and negotiated a price based on the ICPMS method only. He had also talked with the laboratory who made a very expensive bid but they had had not been prepared to reduce their price. Contracts had therefore been placed with five laboratories and the pilot exercise began on 7th May 2002. All samples were delivered successfully. He stated that he had checked the progress of the five laboratories two weeks prior to this meeting and all were proceeding as planned and were confident of meeting the deadline. The only problem experienced was that one of the laboratories had broken one of the samples. The Secretary had arranged for a replacement sample to be sent on the understanding that the reason for the loss of the sample would be documented in</p>	

	<p>the final report.</p> <p>b) The Secretary confirmed that the edited version of the protocol for the spiked samples had been distributed to all board members.</p> <p>c) The Chairman asked for confirmation that measurements of total uranium had been carried out and also that the zinc concentrations (used to ensure that the batch of urine had been adequately mixed) were within the limits specified in the protocol. The Secretary stated that NEQAS had assured him that all tests had been completed successfully although he had received no actual figures. Peter van Calsteren undertook to contact NEQAS to ensure that the tests had been carried out satisfactorily.</p> <p><u>Action 5.3. Peter van Calsteren to obtain total uranium and zinc concentration data from NEQAS</u></p> <p>d) The Secretary confirmed that the pilot exercise would end on 8th July 2002. NEQAS had assured the Secretary that the report on the results of the exercise would be available before the next DUOB meeting on 24th July 2002. The Chairman pointed out that it would be preferable to circulate the report at least a few days prior to the meeting so that members were familiar with the results. The Secretary undertook to contact NEQAS with regard to this.</p> <p><u>Action 5.4. Secretary to contact NEQAS w.r.t. delivery of report</u></p> <p>e) The Chairman expressed his thanks on behalf on behalf of the DUOB to Peter van Calsteren, David Lewis and the Secretary for getting the pilot exercise up and running.</p>	<p>Peter van Calsteren (24/7/02)</p> <p>Secretary (28/6/02)</p>
5.	<p><u>Draft Advertisement For Expressions Of Interest in relation to main testing programme</u></p> <p>a) The Secretary tabled a draft advertisement along with comments from David Lewis and Peter van Calsteren. The text of the advert was discussed and amendments made. The Secretary took an action to circulate the revised advertisement for further comments.</p> <p><u>Action 5. 5. Secretary to revise and distribute draft advertisement</u></p> <p>b) Ron Brown raised the question of testing for other isotopes of uranium e.g. 236U and 234U. Malcolm Hooper stated that this should be looked at if there was the opportunity. There was a discussion about how testing for 234U and 236U would be helpful for veterans. There was no general consensus of this apart from the fact that 236U is a man-made isotope and would demonstrate that non-natural uranium was present in the urine sample.</p> <p>c) Ray Bristow stated that tests for 234U and 236U should be included as a) they have already been detected in veterans, and b) if they are not included he would report back to the NGVFA that the test chosen by the DUOB was not satisfactory.</p> <p>d) Beverley Green expressed concern that the pilot exercise was only looking at 235U and 238U, and there was a danger that the Board was now changing the parameters of the exercise, in which case, this should have been considered at the beginning of the pilot exercise. The Secretary pointed out that, at the meeting with NEQAS to discuss the DU content of the spiked samples for the pilot exercise, he had explicitly asked if other isotopes should be included. All those present had believed that the pilot exercise should concentrate on 235U and 238U. Peter van Calsteren pointed out that this was due to the need to spike the samples with a known standard.</p>	<p>Secretary (28/6/02)</p>

	<p><u>Action 5.10. Chairman to provide a more detailed paper on information for GPs</u></p> <p><u>Information to Veterans</u></p> <p>i) The Secretary had circulated a paper prior to the meeting which had been produced by the Royal British Legion. The Chairman undertook to produce the next draft of this document.</p> <p><u>Action 5.11. Chairman to produce next draft of ‘information to veterans’ paper</u></p> <p>l) Ron Brown pointed out that the MAP had a list of questions that veterans were asked when attending the MAP. This might provide a starting point for a questionnaire to accompany the voluntary urine test. The Secretary undertook to obtain a copy of the MAP questions and circulate it to the DUOB. Malcolm Hooper offered to examine the list and provide a draft list of questions for the Screening programme.</p> <p><u>Action 5.12. Secretary to obtain a copy of the MAP questions</u></p> <p><u>Action 5.13. Malcolm Hooper to draft screening programme questionnaire</u></p>	<p>Chairman (24/7/02)</p> <p>Chairman (24/7/02)</p> <p>Secretary (24/7/02)</p> <p>Malcolm Hooper (24/7/02)</p>
8.	<p><u>Assessment of Background Levels in General Population</u></p> <p>a) At the last meeting it was decided that samples would be taken from several hundred people who have no known exposure to DU to enable the background levels in the general population to be determined. There was some discussion about how these people could be selected. Len Levy suggested that a quick method might be for veterans to bring along a ‘buddy’. Chris Busby suggested that the OHP could take samples from other people coming to the clinic. The Chairman thought that a small contract could be placed with a research organisation to carry out this work. Len Levy asked if there would be any feedback on the tests to those who had provided a sample for this purpose. It was agreed that it was common practice for such tests to be done without such feedback.</p> <p>b) There was some discussion about possible variation over time in urinary excretion of uranium. It was suggested that this could be looked at as part of the study into background levels in the general population.</p>	
9.	<p><u>Epidemiological Studies</u></p> <p>a) The Chairman reported that he had asked the MRC to write to the three research organisations inviting proposals for case-control studies. A meeting would be held with the MRC in the Autumn to assess the proposals.</p> <p>b) Ray Bristow pointed out that if veterans were to be asked about their illnesses or medications as part of the studies they would need advance notice as many veterans suffer from memory problems.</p>	

10.	<p><u>Timescales</u></p> <p>a) Measurements of uranium in the pilot exercise are due to be completed by 8th July 2002. The results will be discussed at the next DUOB meeting on 24th July 2002. The advert for expressions of interest will be placed in the relevant journals at the end of June. This means that an ITT could be issued at the beginning of August. The need to place a contract with a private occupational health provider may influence the timing of the programme of voluntary testing.</p>	
11.	<p><u>DU Background and Scientific Issues</u></p> <p><u>Screening for myeloma, kidney cancer and other disorders</u></p> <p>a) Muir Gray tabled a paper ‘Evaluating The Benefits and Harms That Would Result from Screening For Myeloma, Kidney Cancer, Motor neurone disease and lymphatic leukaemia.</p> <p>b) Muir Gray stated that the diseases being considered were not common and that evidence of a benefit from screening would be difficult to obtain without a 10 year or more screening programme.</p>	
12.	<p><u>Date of next meeting</u></p> <p>a) The date of the next meeting is 24th July 2002 at 09:45. It will be held at the Royal British Legion HQ on Pall Mall. The main topic of discussion at this meeting will be the assessment of the pilot exercise results.</p>	
13.	<p><u>A.O.B.</u></p> <p>a) Malcolm Hooper again raised the question of DU in fireworks. The general consensus of the board was that no-one knew whether fireworks contain DU or not.</p> <p>Post meeting note: Attached at Annex B is a Parliamentary Question asked by the Countess of Mar on 22nd April 2002.</p>	

Distribution:

All members

All observers

Devolved Health Administration

Annex A - DUOB Action List

<u>Action</u>	<u>Date placed</u>	<u>Action Date</u>	<u>Detail</u>	<u>Owner</u>	<u>Comments</u>
1.1	27/9/01	16/11/01	'Definitions of Terms' appendix to be drafted and circulated for comment	Lewis/ Calsteren	COMPLETE – Definitions attached to draft protocol distributed at 2 nd meeting
1.2	27/9/01	16/11/01	Nominations for toxicologist and radiation medicine experts to be sent to GVIU	All OB Members	COMPLETE – See actions 2.2, 2.3
1.3	27/9/01	26/10/01	CVs and declarations of interest to be sent to GVIU	All OB Members	Still awaiting Hooper (short)
1.4	27/9/01	12/10/01	Secretary to establish if payments can be made for Board members to attend meeting	Secretary	COMPLETE – Payments will be considered on an individual basis. Written justification must be forwarded by Board member to GVIU for consideration.
1.5	27/9/01	12/10/01	Secretary to create a claim form for expenses	Secretary	COMPLETE - Form distributed on 23/10/01
1.6	27/9/01	26/10/01	Secretary to distribute a copy of the press release to board members	Secretary	COMPLETE – Press release distributed on 23/10/01
1.7	27/9/01	Ongoing	Board members to write to GVIU with suggestions for further background reading	All OB Members	Ongoing
1.8	27/9/01	26/10/01	GVIU to obtain permission and distribute responses to the 2 nd consultation paper to Board Members	Secretary	COMPLETE – distributed by email on 13/11/01
1.9	27/9/01	26/10/01	GVIU to distribute list of email addresses	Secretary	COMPLETE – Distributed on 23/10/01
1.10	27/9/01	26/10/01	Board members to suggest suitable laboratories to GVIU	ALL OB Members	COMPLETE – 30/11/01
1.11	27/9/01	26/10/01	Secretary to arrange for invitation to express an interest in the 'pilot study' to be advertised in the relevant journals	Secretary	COMPLETE - Advert in MOD Contracts Bulletin on 21/11 and OJEC on 13/11/01
1.12	27/9/01	16/11/01	Produce and circulate draft protocol prior to next meeting	Lewis/ Calsteren	COMPLETE – 30/11/01
2.1	30/11/01	4/1/02	GVIU to send TOR to Minister for comment	Secretary	COMPLETE - Sent on 11/1/02. Minister has approved the TOR.
2.2	30/11/01	8/1/02	CVs for toxicologist to be sent to GVIU. GVIU to forward to Minister	Secretary	COMPLETE – Sent on 15/1/02
2.3	30/11/01	8/1/02	Suggestions for radiation medicine experts to be sent to GVIU	All	COMPLETE
2.4	30/11/01	8/1/02	GVIU to consult Royal College of Radiologists	Secretary	COMPLETE – RCR recommendation received on 24/1/02
2.5	30/11/01	12/12/01	GVIU to notify members of expressions of interest	Secretary	COMPLETE – emailed on 13/12/01
2.6	30/11/01	7/12/01	Draw up Statement Of Requirement for the sample preparation	Van Calsteren	COMPLETE – 1 st draft discussed at meeting with NEQAS on 18/12/01. Will be revised in discussion between LEWIS, van Calsteren and NEQAS
2.7	30/11/01	10/12/01	David Lewis to contact the preferred supplier of spiked samples (and other suppliers if required) to assess interest and costs	Lewis	COMPLETE
2.8	30/11/01	13/12/01	Arrange meeting with supplier of spiked samples	Lewis	COMPLETE – see 2.9 below

2.9	30/11/01	20/12/01	Subgroup to visit supplier	Coggon/ Lewis/ van C/ GVIU	COMPLETE – lab visited on 18/12/01
2.10	30/11/01	28/1/02	Nick Day to review protocol and proposed statistical methods	Day	COMPLETE – Overtaken by events
2.11	30/11/01	21/12/01	David Lewis to redraft protocol for pilot study of analytical methods	Lewis	COMPLETE
2.12	30/11/01	21/12/01	David Lewis to draft the SOR for the urine testing in the pilot study, to be distributed to the OB by 21/12/01	Lewis	COMPLETE – ITT sent to NEQAS on 14/1/02
2.13	30/11/01	10/1/02	OB to comment on the SOR for urine testing by 12.00, 10 Jan 02	All	COMPLETE
2.14	30/11/01	28/1/02	Chairman to appraise MRC of the planned timetable for the development of the testing method	Chair	COMPLETE – Chairman talked to Catherine Moody of MRC
2.15	30/11/01	21/1/02	Chairman to produce paper for next meeting summarising the different types of epidemiological study that might be relevant	Chair	COMPLETE – Paper circulated on 11/1/02
2.16	30/11/01	21/1/02	GVIU to produce a paper on the options for a chain of custody of urine samples	Secretary	COMPLETE – Paper circulated on 25/1/02
2.17	30/11/01	28/1/02	GVIU to identify the position of MOD funding of regional centres	Secretary	COMPLETE – MOD will fund regional centres but the details of this need to be decided
2.18	30/11/01	28/1/02	NRPB to obtain advice on the feasibility of testing for DU in tissue samples obtained at autopsy	NRPB	COMPLETE – paper distributed on
2.19	30/11/01	14/1/01	GVIU to circulate Annexes A and D (on the current ICRP models and Organ Doses from intakes) from the Royal Society report	Secretary	COMPLETE – Circulated on 11/1/02
2.20	30/11/01	21/1/02	GVIU to provide Contracts Branch with the draft protocol in time for ITT issue on 31 Jan 02	Secretary	COMPLETE – ITT issued 26 th Feb 2002. Response date = 9 th April.
2.21	30/11/01	21/1/02	David Lewis/ van Calsteren to prepare a paper on laboratory methods	Lewis/ van Calsteren	Ongoing
2.22	30/11/01	7/12/01	GVIU to arrange a meeting between Chairman and US of S	Secretary	COMPLETE – Chairman met with US of S on 16/1/02
3.1	28/1/02	15/2/02	GVIU to distribute NRPB presentation	Secretary	COMPLETE – Sent out on 19/202
3.2	28/1/02	15/2/02	GVIU to seek permission and distribute Durakovic presentation to RS	Secretary	Ongoing – Durakovic is seeking publication of his findings. Will allow us to distribute slides when this happens
3.3	28/1/02	15/2/02	Brian Spratt to investigate if advance copies of urine excretion section of RS report can be made available to members of the Board	Spratt	COMPLETE – RS report published 12/3/02
3.4	28/1/02	N/A	GVIU to distribute part 2 of the RS report when available	Secretary	COMPLETE – Distributed by the RS
3.5	28/1/02	15/2/02	GVIU to contact proposed specialist in radiation medicine	Secretary	COMPLETE – Dr Spittle appointed to the OB
3.6	28/1/02	15/3/02	GVIU to produce a paper on requirements for main testing programme contract	Secretary	COMPLETE – Discussed at 4 th DUOB meeting

3.7	28/1/02	15/3/02	David Lewis to produce a paper on how laboratories can be judged against each other	Lewis	Ongoing
3.8	28/1/02	15/2/02	GVIU to circulate the McDiarmid paper	Secretary	COMPLETE – Distributed on 19/2/02
4.1	18/4/02	17/6/02	Secretary to improve content and presentation of DUOB website	Secretary	COMPLETE
4.2	18/4/02	7/6/02	OB Members to provide comments on DUOB website to Secretary	All	COMPLETE
4.3	18/4/02	17/5/02	Secretary to contact RS re. distribution of RS paper	Secretary	COMPLETE – Missing reports distributed
4.4	18/4/02	16/4/02	Secretary to circulate the MOD research proposals	Secretary	COMPLETE – Sent 26/4/02
4.5		17/5/02	Secretary to edit and distribute protocol document	Secretary	COMPLETE – sent by email 20/5/02
4.6	18/4/02	ASAP	Secretary to arrange for the two bidders to requote for pilot exercise	Secretary	COMPLETE
4.7	18/4/02	26/4/02	Secretary to arrange for pilot study contracts to be placed	Secretary	COMPLETE - 5 contracts placed on 29/4/02
4.8	18/4/02	26/4/02	PvC to visit NEQAS in the week beginning 22/4	Van Calsteren	COMPLETE - Overtaken by events
4.9	18/4/02	17/6/02	Secretary to draft advert for main testing contract for approval for the DUOB	Secretary	COMPLETE – Draft circulated prior to 5 th DUOB meeting
4.10	18/4/02	11/6/02	Muir Gray to produce a paper on sample collection/provision of advice	Muir Gray	COMPLETE - Papers distributed on 17/6/02
4.11	18/4/02	17/5/02	Chairman to produce a draft of information to be given to GPs	Chair	COMPLETE – Circulated by email on 24/4/02
4.12	18/4/02	17/5/02	RBL reps to produce a draft of advance advice to veterans and advice once results are known	Green/Gilmore	COMPLETE – Circulated by email on 20/5/02
4.13	18/4/02	17/5/02	Secretary to circulate the McDiarmid paper on spot samples	Secretary	Ongoing – awaiting permission to circulate
4.14	18/4/02	17/5/02	Suggestions for ways of communicating the availability of voluntary testing	All	COMPLETE
4.15	18/4/02	17/5/02	Chairman to write to MRC re. epidemiological studies	Chair	COMPLETE – letter sent on 24/5/02
4.16	18/4/02	17/5/02	Chairman to discuss research with LSHTM	Chair	COMPLETE – discussed following 4 th meeting
4.17	18/4/02	17/5/02	GVIU to report on MOD research into health effects of DU	GVIU	COMPLETE – post meeting note in minutes of 4 th meeting
4.18	18/4/02	17/5/02	Secretary to distribute new schedule	Secretary	COMPLETE – circulated by email on 22/5/02
4.19	18/4/02	17/6/02	Muir Gray to produce report on the potential for screening for myeloma ...	Muir Gray	COMPLETE – tabled at meeting on 17/6/02
4.20	18/4/02	17/5/02	GVIU to check if abdominal ultrasound is a standard procedure at the MAP	GVIU	COMPLETE – post meeting note in minutes of 4 th mtg.
4.21	18/4/02	17/5/02	Secretary to circulate web address of the UNEP report	Secretary	COMPLETE – post meeting note in minutes of 4 th mtg

Annex B

Fireworks: Depleted Uranium

The Countess of Mar asked Her Majesty's Government:

Whether depleted uranium is present in any fireworks, whether manufactured in the United Kingdom or manufactured elsewhere and imported.[HL3660]

The Minister of State, Department for Transport, Local Government and the Regions (Lord Falconer of Thoroton): The Health and Safety Executive's Explosives Inspectorate has wide experience of licensing and inspecting sites used for the manufacture and storage of fireworks. It knows of no cases where depleted uranium (DU) has been used in fireworks, whether they have been manufactured in the UK or imported from elsewhere. The primary function of DU in an explosives context is its use in munitions designed to penetrate armour plate. HSE is not aware of any valid contribution that the material would make to a pyrotechnic composition and in its view the cost of using it would be prohibitive.