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[REDACTED]

**Minutes of the Twentieth Meeting of the
Depleted Uranium Firing Environmental Review Committee
held at [REDACTED] on Tuesday 19 October 1999**

Present

- | | |
|------------|-----------------------------|
| [REDACTED] | DERA Boscombe (Chairman) |
| [REDACTED] | DERA Eskmeals (Secretary) |
| [REDACTED] | DERA Eskmeals |
| [REDACTED] | DERA Eskmeals |
| [REDACTED] | DERA Farnborough |
| [REDACTED] | DERA Eskmeals |
| [REDACTED] | DRPS |
| [REDACTED] | MoD Abbey Wood |
| [REDACTED] | MoD D SEF Pol |
| [REDACTED] | MoD DEC(DBE) |
| [REDACTED] | BAe/Royal Ordnance |
| [REDACTED] | Kirkcudbright Training Area |

The Chairman welcomed [REDACTED] ARP Co-Ord from DEC(DBE), formerly DOR(Land), to the meeting.

Item 1: Apologies for Absence

1. Apologies for their absence were received from [REDACTED] and [REDACTED]

Item 2: Minutes of the 19th Meeting

2. The minutes of the meeting held on 24 June 1999 were approved as an accurate record of the proceedings.

Item 3: Matters Arising

3. Actions from the 19th and previous meetings were discussed:
 - a) Action 19/1. [REDACTED] reported that there was one member of staff who was normally used for all environmental sample collections. A personnel reorganisation at Eskmeals had recently been completed and other staff have now been nominated to receive training. Initial training will be given in the near future, to be followed up with 'on the job' training during the next collection. Action complete.
 - b) Action 19/2. [REDACTED] said that the risk of cross-contamination during the collection of environmental samples would always be present, but he was happy with the abilities and training of the staff and with the collection protocols that had been established. He was satisfied that the risk had been minimised as far as possible. In a written response, [REDACTED] said that he had discussed the detailed sampling methodology with [REDACTED]. No pathways for cross-contamination of samples were

[REDACTED]

apparent. [REDACTED] also looked at the sample processing in DRPS labs, but the UKAS accredited methods employed virtually ruled out any possibility of cross contamination at this point. It will therefore be necessary to keep results under review for any possible recurrence. Action complete.

- c) [REDACTED] asked if there was any further information available regarding the anomalous results - could this have been as a result of cross-contamination? [REDACTED] and [REDACTED] believed this was not currently easy to determine, but one-off results are by their nature inconclusive and it would be necessary to monitor trends. The latest environmental sample collection had been completed the previous week and the results could be available in as little as three or four months. [REDACTED] added that although the levels in question had been higher than normal, no results were approaching any trigger levels.

Action 20/1: DRPS to bring forward the analysis of the latest environmental samples; Eskmeals to continue to check for possible cross-contamination pathways.

- d) Action 17/6. [REDACTED] summarised the information that he had obtained regarding the reporting chain in the event of an unidentified object being recovered by a fisherman. The first point of contact was not the Coastguard, as had been believed, but the local Harbourmaster. Standing instructions were that the object should be replaced into the sea and a description of the object and precise location logged. The EOD unit at Faslane would only respond to instructions from their Headquarters and not to a call from the Coastguard or Harbourmaster. [REDACTED] had not yet obtained details of whether the Whitehaven Harbourmaster and his colleagues further along the coast provided 24-hour cover. However, it was clear that some information and training should be provided to the Harbourmaster, and this could be provided in conjunction with training which had been requested by the Firemaster at Kirkcudbright (see Item 6). The procedural guide/flowchart could now be completed using the information available. Action complete.

- e) Actions 17/7 and 18/2. [REDACTED] outlined Eskmeals' present callout system, which was expanded and clarified by [REDACTED]. Initial contact is still with a member of the Range Management Board, who would subsequently contact an appropriate specialist. In practice, the Fireguard would probably have already done so. Specific training for staff is therefore not required, although there is clearly a requirement for contact telephone numbers to be readily available to the Fireguard. [REDACTED] confirmed that this would be checked, and that the DRPS Duty RPA telephone number would also be made available. Actions complete.

Action 20/2: [REDACTED] to review the Site Operating Plan to verify that the appropriate procedures are documented.

- [REDACTED]
- f) Action 19/3. [REDACTED] had spoken with [REDACTED] regarding Terms of Reference and this is currently under review. Action **continuing**.
 - g) Action 19/4. In a written response, [REDACTED] said that the assessment of a possible injection dose from a recovered DU projectile would be carried out during week commencing 1 November 1999. It will be forwarded to the Secretary for circulation to the Committee before the next meeting. Action **continuing**.
 - h) Action 18/3. Although there was no continuing DU work at Eskmeals, the majority of DU-related monitoring and remediation by T&E Ranges and DRPS, including that at Kirkcudbright, was still funded from Eskmeals' budget. This was clearly inappropriate. Neither DPA nor the OR Branches had so far accepted any responsibility for the legacy contamination, as customers for past firings. [REDACTED] welcomed the presence of [REDACTED] on the Committee as a positive step towards giving DEC(DBE) a better view of the issues and difficulties being faced by DERA. Action **complete**.

Action 20/3: [REDACTED] to brief DOR(Land); this is to be followed up by [REDACTED] who will discuss funding arrangements.

- i) The options for VJ Battery were discussed, including continuing care and maintenance and the disposal of waste arising from any decommissioning work. It was noted that the Environment Agency might not accept a partial decommissioning option but could, in principle, insist that full decommissioning and land remediation be carried out.
- j) Concerning Kirkcudbright, it was noted that the site had not been vested in DERA upon its formation in April 1995. DERA had managed the DU firing programme and attached health, safety and environmental issues arising since. Contamination caused by recent malfunctions had been managed appropriately, but it was clear that no action could be taken on 'historical' contamination. [REDACTED] expressed his concerns and expressed the hope that the HQ Land Command was preparing appropriate plans to deal with this, particularly as the imminent RWMAC review may enquire into the issue. He felt that there was an urgent need to make the appropriate parties aware of this.
- k) [REDACTED] reported that a number of additional firings were now required by the customer. Two were to be carried out the following week, and the programme would continue into 2001 and possibly beyond. It was appropriate that [REDACTED] should be aware of this.

Action 20/4: [REDACTED] to write to [REDACTED]

- [REDACTED]
- l) Action 19/5. In a written response, [REDACTED] said that he had spoken with DG(Nuc) - the MoD Department responsible for the control of nuclear materials - and asked them to provide a statement regarding which organisation holds title to the DU fired on the ranges. Unfortunately no definitive statement was obtained, but it appears likely that the organisation holding the DU is responsible for it. Action **complete**.
 - m) Action 19/6. Copies of the requested correspondence on VJ Battery remediation options had been forwarded, but the budget proposal required further assessment of the extent of contamination before it could be completed. Action **continuing**.
 - n) Action 19/7. The possibility of a 'soft' recovery of a DU projectile at one of the American facilities had been investigated and was possible, but at a significant cost. Since there was no firm requirement for this from any of the customers, it was decided not to proceed. Action **complete**.
 - o) Action 19/8. Copies of the requested correspondence on the history of DU prior to round manufacture had been forwarded, and [REDACTED] had received assurances from [REDACTED] that none had been through the reactor cycle. Action **closed**. [REDACTED] had requested further analysis details from StarMet in the US but, despite reminders, no response had yet been received. [REDACTED] informed the Committee that according to allegations contained in an American DOE news release, there had been concern in the US over the contamination of plant by fission products. However, this was considered not to be a health hazard, it did create a presentational problem. Committee members were asked to note that DU currently had high Ministerial and media profiles, with interest from the Balkans Secretariat, GVIU and others. Releases to external bodies should therefore be cleared through [REDACTED] at D/SEF Pol. His full contact details are:

[REDACTED] Head of Health Physics
Directorate of Safety Environmental and Fire Policy
St Christopher House, Southwark Street
London SE1 0TE

Telephone: [REDACTED]
Fax: [REDACTED]
e-mail [REDACTED]
CHOS : D SEF Pol PHP

Action 20/5: [REDACTED] to continue to press for details of the analyses carried out by StarMet.

Action 20/6: DRPS to re-assess the various dose estimates, on the basis of the latest information on the isotopic content of DU.

[REDACTED]

p) Action 19/9. The liaison with [REDACTED] is continuing; any further ideas on possible areas of collaboration would be welcome. Action **continuing**.

q) Action 19/10. Following [REDACTED] investigations, it appeared possible that the marine DU garden might be established at Luce Bay on a submerged concrete plinth previously used as the foundation for a target gantry which was to be demolished. The SEPA were aware and approve of the general plans and the local Council would be informed. Action **complete**.

Action 20/7: [REDACTED] to ensure that the appropriate contacts are made and kept informed.

r) Action 19/11. Computer modelling of projectile entry into water had been started. [REDACTED] reported that preliminary results indicated the tip of the projectile would erode and the projectile may deform. Although this did not correlate with data obtained from examination of the *Destiny* round, there were a variety of possible geometries of entry which may lead to different effects. Action **continuing**.

s) Action 19/12. [REDACTED] informed the Committee that sampling for the presence of Beryllium had been carried out during one trial to date. Air sample analysis had not shown any Be to be present, but smears taken from the used TVEs had given positive results. The Be/Cu TVEs used were not, however, in service use and were being phased out for proof work. Any hazard would therefore reduce to zero over time. The procedures for handling and disposal of used TVEs had been reviewed and were found to be excellent. Air sampling would continue for several more firings, to verify the initial results. Action **complete**.

t) AOB (Minute 13). In a written response, [REDACTED] said that the cost of undertaking α spectrometry on the high volume air samples from Eskmeals would be £181 per sample.

Item 4: Depleted Uranium Gardens

4. Although she was absent from the meeting, [REDACTED] had submitted a written report and a copy is appended to these Minutes.

Item 5: Kirkcudbright Public Meeting / General Public Relations

5. [REDACTED] had led the DERA delegation at the public meeting in Kirkcudbright, which had been preceded by a meeting with members of Kirkcudbright Council's Fire, Police and Environment Committee. This was the third annual briefing to the Council and the second to the public, and [REDACTED] felt that we had received a positive response. There was a very vocal and ill-informed minority lobby against DU firings but local residents were generally supportive of DERA and its policy of openness and

[REDACTED]

honesty. It was felt by most of those present that DERA was giving the facts as they were known.

6. Some extremely valuable contacts had been made at the meeting, most notably [REDACTED] the Firemaster. It had been agreed that DERA Eskmeals would provide information, advice and simple training to the Fire Brigade - and, possibly, Police and other involved organisations - to enable them to better handle the eventuality of a DU projectile being recovered. It was felt that this kind of information should also be made available to similar organisations local to Eskmeals.
7. One of the anti-DU lobby, [REDACTED] had made a claim that a block of DU was in use in Kirkcudbright Harbour as a public mooring anchor. It was suggested that this allegation should be followed up, with the involvement of [REDACTED] the Council and SEPA (and possibly the local media). This was agreed.
8. There was some concern that since the Army owned the land, HQ Scotland might receive enquiries regarding DU and contamination of parts of the Kirkcudbright range. [REDACTED] felt it was important that they should be encouraged to develop appropriate contingencies to deal with this.

Action 20/8: [REDACTED] to produce a plan for HQ Scotland Steering Committee to consider.

9. [REDACTED] considered that the outcome of the meeting had been very positive and extended his thanks to all involved, on behalf of the Sector Board of Management.
10. [REDACTED] noted that the Campaign Against DU, an offshoot of Manchester and District CND, was orchestrating media interest and claiming that the use of DU results in the birth of malformed children. Lord Monkswell had recently been involved in enquiries into fission product contamination of DU, and there was concern up to Ministerial level. [REDACTED] had produced a paper giving the MoD Position on the health effects of DU.
11. [REDACTED] added that a claim had been made, later verified by the NRPB, that the Dumfries and Galloway area displayed the highest incidence of childhood leukaemia in the country. The epidemiologists had not, however, made any links to DU and there were many possible causes, including simply statistical variation.

Item 6: Kirkcudbright Update

12. [REDACTED] gave a short presentation covering recent activities at Kirkcudbright during which areas of contaminated land had been found, beyond that which had been anticipated.

- [REDACTED]
13. Following a general discussion, it was agreed that any contamination arising as a result of DERA's activities would continue to be dealt with by DERA but that "historical problems" should be passed on to the appropriate owner, with appropriate advice.

Item 7: Barrel Monitoring - Screening Trials

14. DRPS had received a request to 'screen' ex-Gulf War gun barrels for the presence of DU contamination. The current protocol for monitoring barrels, as developed by Eskmeals, was time consuming but gave an accurate location within the barrel of any contamination. This was not necessary for a straightforward screening, where simple pass/fail monitoring was required.
15. A new measuring device, consisting of a large area detector connected to a scaler, had been developed by DRPS and trialled by them at Eskmeals using barrels that had previously been monitored. This instrument had worked extremely well and reduced the time required for monitoring from six hours to 40 minutes per barrel. Barrels which 'failed', i.e. were DU contaminated, would still need to be properly monitored.

Item 8: Management of Controlled and Supervised Areas at Kirkcudbright

16. [REDACTED] had requested this item. A small number of contractors had been refused access to Raeberry by DERA, in the interests of safety. He considered that as Head of Establishment and Radiation Safety Officer for Kirkcudbright, with the Range Officer appointed as the Radiation Protection Supervisor, he should have been consulted before DERA imposed any restrictions. [REDACTED] acknowledged the oversight, although the intention had been to exercise a duty of care to the contractors, based on known hazards. Procedures had since been reviewed.
17. Local Radiation Safety Orders had now been published at Kirkcudbright and the requirement to control exposure of both the public and the workforce had been discussed and advice obtained from the RPA(Army). It was noted that the RPA and [REDACTED] would be visiting Kirkcudbright Training Area in November to obtain more detailed knowledge and issue further advice.

Item 9: Any Other Business

18. [REDACTED] informed the Committee that a request to film at VJ Battery in connection with the "Close Up North" regional TV programme had been received from BBC Manchester. Very little information about the content of the programme was available but it was hoped that the issues to be covered could be discussed with the producer in advance. [REDACTED] agreed to attend, with [REDACTED] and [REDACTED].
19. [REDACTED] drew the Committee's attention to a news release from the US Department of Energy concerning the use of recycled Uranium. Copies were requested by [REDACTED] and [REDACTED], further copies are available from the Secretary on request.

- [REDACTED]
20. [REDACTED] reported on a claim that had been made by a DERA photographer that he had been involved with early DU firings without the provision of protective clothing, dosimetry or information. This had been thoroughly investigated. It had been proved to the claimant's entire satisfaction that he had been mistaken, and the claim had been withdrawn.

Item 10: Date of Next Meeting

21. It was agreed that the next meeting would be held at [REDACTED] commencing at 0930 on Thursday 27 January 2000.

There being no further business, the Chairman thanked everyone for attending and the meeting was closed at 1630.