

**Minutes of the 57th Depleted Uranium Firing Environmental Review Committee (DUFERC)
of 19th January 2011**

Held at Dstl Alverstoke, Lecture Theatre 3

Present:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
MoD TEST
MoD SSD&C
Dstl ESD
MoD KTA Commanding Officer
MoD SO2 RAD (CESOA)
[REDACTED]
[REDACTED]

Secretary -

[REDACTED]

Dstl ESD

Apologies:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
MoD SSD&C
[REDACTED]

MoD TEST
MoD DE

<i>Item</i>	<i>Discussion and decisions</i>	<i>Actions</i>
1.	Introduction	
1.1	[REDACTED] welcomed [REDACTED] to DUFERC and those present introduced themselves and their role.	
1.1.1	[REDACTED] presented an email from [REDACTED] giving his apologies and stated that [REDACTED], Group Functional Lead for Health and Safety will become a member of the committee when he joins QinetiQ on 1 st February. [REDACTED] to be sent minutes for the meetings and [REDACTED] to be informed of future dates.	
2.	Previous minutes	
2.1	Action 55.1 was asked to be added to the 'Summary of Outstanding Actions' section.	
2.2	On page 3, paragraph 4, the question mark after RPPDC should be deleted.	
2.3	Following these amendments, the minutes of the 56 th DUFERC meeting were accepted by the committee.	
3.	Outstanding actions	
3.1	Action (55.1) [REDACTED] to speak to Defence Estates (DE) to clarify who is the RPA for KTA. [REDACTED] explained how this matter related to the wider issue of how MoD complies with management of health and safety regulations. With respect to KTA, there are several agencies with interest in the	Action closed

- site, but no documented set up for RP advice for the day to day work activities.
- 3.1.1 [REDACTED] has been told that the army budget allows for another 5 years of financial support for providing RPA advice to KTA from DSTL. He stressed however, that this was not a core business for the army and that the funding was therefore at risk. He also stressed the importance of technical advice from both QinetiQ and Dstl.
- 3.1.2 [REDACTED] explained that [REDACTED] (DE Ops DTE) had prepared a business case on the matter however the SSDR and subsequent funding concerns had put the issue on hold.
- 3.1.3 [REDACTED] asked the committee at what level it was appropriate to monitor this situation, as this was just one example of a wider issue. [REDACTED] explained how the recent proposed formation of the Defence Infrastructure Organisation (DIO) (which planned to amalgamate DE and other bodies which dealt with contamination issues) had an impact on this matter. She stated that she considered the matter should be raised with RPPDC.
- 3.2 **New action (57.1) for [REDACTED] to raise the issue of management of health and safety responsibilities during MoD reorganisation with specific reference to RP advice at KTA at the next RRPDC meeting and to report back on findings.** JJ
- 3.3 *Action (52.2) [REDACTED] to produce a presentation for future firing of DU'* Action closed
 [REDACTED] had amended the presentation for [REDACTED]. Specifically the changes made revolved around the need for a contingency plan in the case of a contamination issue. When raising a contract, QinetiQ and Defence Munitions (DM) needed to discuss whose responsibility a contaminated land issue would be.
- Action (55.5) [REDACTED] to amend the DU firing presentation to reflect the DUFERC input and return it to [REDACTED] also closed as a result of the above.* Action closed
- 3.4 **New action (57.2) for [REDACTED] to bring the completed presentation to the next DUFERC meeting.** [REDACTED]
- 3.5 *Action (55.4) [REDACTED] to circulate his suggestions regarding the amendments to the DUFERC Terms of Reference (ToR)* Action closed
 [REDACTED] expressed his concern that the ToR for DUFERC do not set out the rationale for its formation. [REDACTED] stated that a section should be included which explained where DUFERC gets its authority from, and what it has responsibility over. The committee agreed governance was lacking from the document, and should be included.
- 3.5.1 The issue was raised as to whether DUFERC should be defined as a sub-committee of RPPDC. [REDACTED] voiced concern this may negatively influence SEPA's ability to see DUFERC as an independent impartial group. [REDACTED] stated that it was hard to separate the two committees as both were funded by MoD. [REDACTED] emphasised an earlier point that [REDACTED] has shown himself to be impartial in previous dealings with

the army.

- 3.6 New action (57.3) [redacted] to analyse ToR from the Legislative Tracking Group with the aim of using it as a basis for the revision of the DUFERC ToR. [redacted]
- 3.7 New action (57.4) A draft version of the revised ToR to be supplied to the committee prior to the next RPPDC meeting (16th Feb). [redacted]
- 3.8 Action (55.6) [redacted] to discuss the proposed (Eskmeals) sampling with [redacted] (RPA for Eskmeals) Action closed
[redacted] explained the new sampling procedures were more detailed as they now included ground (dust) sampling around the perimeter at air sampling locations. [redacted] said he had no issue with this from a policy side but expressed the need for QinetiQ to be able to justify this change if ever questioned. [redacted] explained the introduction of dust sampling was as a back-up to the air sampling, and was introduced at a time when the main power supply to the air samplers went down.
- 3.8.1 [redacted] asked if there was a risk that the air samplers were becoming uneconomical. [redacted] replied that Eskmeals had the ability to carry out repair and maintenance work and had a continuous maintenance programme in place, he went on to explain that although the casings were original the internal components were in effect new. [redacted] added that there was no danger of Eskmeals losing the ability to carry out high volume sampling.
- 3.9 Action (56.1) [redacted] awaiting outcome of DE business case-review when received'. Action ongoing
[redacted] stated this action was on hold. He planned to take this action and talk to DE.
He would let [redacted] know the outcome in time for the next RPPDC meeting (16th Feb).
- 3.10 Action (56.2) [redacted] to draft a letter concerning the importance of the LLWR inventory to the RPPDC to ensure that the TEST input is not overlooked. Action closed
[redacted] stressed the need for DRIGG LLW (Low Level Waste) Repository to have good notice of any planned delivery of waste from Eskmeals with respect to the amount, the activity, and the planned date. [redacted] stated this was a difficult question to answer due to the number of uncertainties involved and that DE rather than TEST had funded Eskmeals' Phase 1. [redacted] replied that a rough idea would be better than no indication. [redacted] referred to a statement made by [redacted] in his return with respect to contaminated land and uncertainty in future arisings.
- 3.11 New action (57.5) [redacted] to liaise with DE to discuss the matter of LLW disposal plans for Eskmeals.

- 3.12 Action (56.3) [redacted] to invite the new TEST Ops Delivery Manager [redacted] to the next DUFERC meeting. Action closed
[redacted] sent his apologies, with [redacted] attending as his deputy. [redacted] asked if TEST saw benefit from having a representative on the committee. [redacted] replied that he could see benefit and that he believed it was necessary to have a MoD representative from the DU ranges present. [redacted] agreed that either [redacted] or [redacted] should attend the meetings.
- 3.13 Action (56.4) [redacted] write to DE identifying the issues relating to the LLW steel from VJ' Action closed
This action was discussed under Action 56.2. It was clarified that DIO will have responsibility for VJ Butt as well as the land at the site.
- 3.14 Action (56.5) [redacted] to speak to [redacted] about the viability of phytoremediation of the DU contamination of the land surrounding VJ battery. Action closed
Taken under Item 4 below.
4. [redacted]
- 4.1 [redacted] visited Eskmeals with the purpose of discussing further research into the behaviour of DU fired against hard targets in the in the environment. One of his PhD students, [redacted] had been given funding to carry out this research project. TEST has given permission to take samples from the VJ facility. As part of this project [redacted] is going to work with QQ to investigate the viability of phytoremediation on this site
- 4.2 [redacted] stated that events had clearly moved as his contacts with [redacted] and Manchester University had not shown an intention to progress this.
- 4.3 [redacted] emphasised the point that any research carried out at Eskmeals had the benefit that it prolonged the period before which the contaminated structures and land might be classified as waste. [redacted] explained that the cost of decontamination of Eskmeals was to be funded by MoD DE. [redacted] also stated that if the study was successful it was likely to be a significantly lower financial cost than the stages involved in traditional remediation (e.g. EIAs).
- 4.3 The question was asked whether Kirkcudbright could have similar studies carried out on the site. [redacted] was happy for this to be the case.
- 4.4 New action (57.6) [redacted] to monitor progress of [redacted] study [redacted]
5. Eskmeals report [redacted]
- 5.1 AMEC have loaded the VJ scrap into containers and are awaiting the turnaround of paperwork. Once this has occurred Phase 1 will be complete. [redacted] believed that this would be in a couple of weeks. One issue with the work was that the quantity of DU in the steel estimated by AMEC was surprisingly large (2 tonnes) and well

above the QinetiQ estimates on which their RSA authorisation was based. So a change to their licence for the holding of radioactive material was needed. Problems arose as the EA considered QinetiQ had not informed them promptly enough of the quantity of DU they were holding. QinetiQ had asked AMEC for analysis of results from smelting of the scrap. [REDACTED] stated that since QinetiQ were a commercial organisation they did not fit under the MoU that MoD had with the EA so caution was needed in extrapolating from MoD procedures. He referred to a recent incident where SEPA had made the point clear that paperwork should only be signed by those who have the authority and the responsibility that renders them suitable. [REDACTED] reiterated this with a similar example encountered at Farnborough. [REDACTED] stated that if the EA had issue with waste designation procedures, then it was MoD, and not QinetiQ's responsibility.

5.2 The discussion then turned to the consistency of advice that QinetiQ were receiving from EA. [REDACTED] suggested that the matter could be raised (via SSDCD) with the Small Users Liaison Group made up of members from the non-nuclear industry, to determine their experience with EA.

5.3 Finally the issue of Qualified Expert (QE) and its definition was discussed. [REDACTED] stated she had received responses from numerous functions including BAE and Devport Dockyard. All are against the idea of a change to the interpretation of a QE. [REDACTED] suspected that any change would make a QE more onerous than an RPA's role, and would cover waste management. [REDACTED] stated that the EA consultation closed on 14th January.

6. Kirkcudbright report

6.1 On the 10th January Dstl carried out an RPA visit on the site. No significant issues were raised in the wash-up at the end of the visit. The next visit was planned for 2013 and a date had been set for the 2011 environmental survey. [REDACTED] suggested that it would be a good idea for [REDACTED] to inform Munitions IPT of when he wanted the 2013 environmental survey to be carried out, so that any conflict with firing tests scheduled for 2013 could be avoided. [REDACTED] stated monitoring carried out during tank firing would be difficult during the winter months. April, May and June were most suitable for the munitions tests from the KTA and QinetiQ perspective.

6.2 **New action (57.7)** [REDACTED] to initiate contact with Munitions IPT to see if Apr-June was possible to time the 2013 firing tests. [REDACTED] spoke to Munitions IPT on 20th January 2010, awaiting response)

7. Dstl Report

7.1 Matters Arising

7.1.1 [REDACTED] has been sent a copy of the paper sent to the Iraq Inquiry by those opposed to the use of DU munitions.

7.2 Parliamentary Business

An Early Day Motion called on the UK Government to support a UN resolution calling on states to provide quantitative and geographical data on their use of DU munitions. Dstl noted that an earlier PQ (in July 2010) had stated that other nations' choices to share or not to share information was a matter for them alone and that this could provide the basis of the answer and any subsequent FCO briefing.

Dstl assisted with Ministerial Correspondence on a Uranium Medical Research Centre (UMRC) report on DU munitions. It was recommended that the use of existing MOD lines should be strengthened by noting that the UMRC is a single interest pressure group with a very small membership and no official standing. Also that the report mentioned contains information, theories and allegations which are familiar and have been rejected by MOD on many previous occasions.

7.3 *Legislation*

Some apparent differences of opinion between national and local regulators may have implications for transfrontier shipments associated with the recycling of MOD's Phalanx munitions. Dstl are monitoring developments and have found the EA to be supportive of MOD's position.

7.4 *Freedom of Information*

No information could be found to substantiate a Wikileaks report that US Forces had passed a "DU grenade" to UK Forces in Iraq in March 2004.

7.5 *Media*

Dstl recommended that expert medical advice should be sought on a US article concerning heavy metal exposures during military operations. This article was not specific to DU, but shared many features (innuendo, incomplete facts and unanswered questions) of DU-related media reports.

7.6 *Technical Issues*

Dstl provided advice to DE Ops DTE [REDACTED] on remediation at Kirkcudbright. Caution is needed when letting contracts as there is a high risk of disproportionate cost arising from use of sub-optimal analysis techniques and from uncertainties in the nature of the contamination. Agreement is also needed on procedures for averaging and sampling inhomogeneous contamination and on the means of providing the CO with radiation safety advice.

7.7 *Knowledge Integration*

Dstl learned that a number of different Departments need to dispose of bulk DU metal (such as DU penetrators and aircraft counterbalance weights) and suggested the possibility of economies of scale.

No definitive information was received on the possible use of DU in Phalanx systems deployed for Counter Rockets, Artillery and Mortar (C-RAM) purposes in Iraq. The consensus was that use of DU was unlikely.

8. **Any other business**
No other items were raised by any member of the committee.
9. **Date of next meeting**
The next meeting of DUFERC will be 4th May at Kirkcudbright, commencing 10.00 am.

Summary of outstanding actions

Item	Description	Action
New		
57.1	to raise the issue of management of health and safety during MoD reorganisation with specific reference to RP advice at KTA at the next RPPDC meeting and to report back on findings.	
57.2	to bring the completed presentation on DU firing to the next DUFERC meeting (4 th May).	
57.3	to analyse ToR from the Legislative Tracking Group with the aim of using it as a basis for the revision of the DUFERC ToR.	
57.4	A draft version of the revised ToR to be supplied to the committee prior to the next RPPDC meeting (16 th Feb).	
57.5	to liaise with DE to discuss the matter of LLW disposal plans for Eskmeals.	
57.6	to monitor progress of Prof. Livens' study.	
57.7	to initiate contact with Munitions IPT to see if Apr-June was a possible time for 2013 firing tests at KTA.	
Outstanding		
56.1	to talk to DE regarding the DE business case review and inform of the outcome before the next RPPDC meeting (16 th Feb).	