# Minutes of the 53<sup>rd</sup> Depleted Uranium Firing Environmental Review Committee (DUFERC) Meeting held at QinetiQ Eskmeals on the 22<sup>nd</sup> September 2009

# Present: M. T. Coo. (TC) MOD TEST Team Dstl Environmental Sciences Department Principal Scientist SO2 RAD (CESOA) MOD Commandant KTA QinetiQ Deputy Radiation Advisor SDS Project Manager MOD DE Oir Coo. (CESOA) Apologies: QinetiO F

### 1. Introduction

welcomed the committee to QinetiQ Eskmeals for the 53<sup>rd</sup> meeting of the DUFERC.

### 2. Previous Minutes and Matters Arising

job title should have read 'MOD TEST Team' and not 'MOD TEST IPT'.

In Item 6 'Dstl Report', within the 'Technical Reports and Issues' section it stated: 'SEPA – Risks of radium contamination from work carried out by SEPA continue.' This should have read 'SEPA – Risks of radium contamination from work carried out by review continue.'

The rest of the minutes of the 52<sup>nd</sup> DUFERO Meeting were approved by the committee.

### 3. Actions

Action 51.4 - to show the information in the DUFERC Investigation and Action Levels Report in a graphic way at the next DUFERC meeting.

Post Meeting Note – On 29<sup>th</sup> Sept 2009 emailed to DUFERC members an amended table comparing DUFERC and natural uranium levels. See Item 4.

Action Complete

Action 52.1 to draft a paper for the next meeting for members to review giving details of the findings of the review of the trial file.

to do this. This check if this has been done.

Action On-going

Action 52.2 – to bring a draft standing order to the next meeting which will be extended to include timeline.

has taken over this action and will produce the SO at the next meeting

On-going

Action 52.3 — to circulate to the DUFERC members comments about proposal to re-site 3 of the HVASUs. sent the comments to apologised that he could not find them in his Inbox. promised to send them through to again. Post Meeting Note - On 2<sup>nd</sup> Oct 2009 forwarded to the DUFERC members an email of comments from following the circulation of proposal to re-site 3 of the HVASUs. DSTL is represented on the DUFERC bearing who was part of the above circulation (21st Nov 2008) of the proposal and to the best of my knowledge raised no objection to the move. This proposal was discussed at the DUFFE on Sept 2009 and the move was agreed. An action was placed on the send a letter to TEST (through with the proposal. TEST subsequently agreed the move and a defensive brief was written based on the original proposal. An email to all stakeholders was issued on 11th Mar 2009 stating that the move was to take place. A further month was given for any responses to this email and none were received. The HVASUs were, therefore, moved between the 16th and the 23<sup>rd</sup> Apr 2009. The regional EA inspector has been closely involved with this proposal and was in agreement with the move. Action Complete Action 52.4 - to send a copy of the minutes of the 51st DUFERC Meeting to will ensure that stated that has been replaced by is included in the distribution of future minutes. **Action Complete** Action 52.5 - to email out to DUFERC members the information about the Scottish Executive's concerns about safety during the transport of DU munitions in Scotland. to complete by the end of this week. Post Meeting Note - On 2<sup>nd</sup> Oct 2009 emailed to DUFERC members pdf files with papers relating to the transport of DU in Scotland. Action Complete **DUFERC Investigation and Action Levels** to add background to the table levels. will add this for the next meeting. The column 'Naturally Occurring' will be added to the table. The thrust of it will be to show how safe the levels are. On 29th Sept 2009 emailed to DUFERC members an amended table comparing DUFERC and natural uranium levels. Kirkcudbright Report

eported- The fences around the Raeberry firing point have now been repaired.

The Bi annual environmental survey sampling took place on 15th and 19th June 2009.

5.

It had been suggested that KTA were going to have a series of 4 CCTVs around the coast. These would have relieved the site from the need to have a range boat. However the cost of putting the CCTVs in place would be very expensive (approximately £125K) therefore the contract with for the supply of a boat and crew will be extended instead. There is some discussion about renewing the fences around the contaminated areas but this has not been done as yet. Within the fenced areas the marker pegs that indicate where DU contamination was identified in the late 1990s. raised the question that; these pegs are still present but this survey was never completed therefore they do not give a comprehensive view of the full extent of the contamination present. As a full survey is unlikely to be carried out until land remediation is planned should these be maintained. Maintaining the markers is an indication that commandant knows there is land contamination there and it is being managed. Renewing the markers also shows an ongoing commitment. Currently there are no plans re-mediate these areas until such time as the MoD hands the ranges back to the public. Although there is no formal management plan the commandant manages the contaminated areas by treating them as no access zones. These areas are regularly patrolled from outside of their fenced perimeters. Should a fire be detected within one of these areas it would be contained from the outside and be left to burn itself out. This precaution is largely due to the danger of unexploded ammunition remaining in the area but has the advantage of ensuring that no one enters the area unless escorted by the commandant (or the range officer) who will ensure that they are monitored for contamination on leaving the area. added that he had a suitable contamination monitoring instrument on loan from Eskmeals but it had been returned for calibration in April/May 2009. He has not yet received a replacement. It was agreed by the committee that the DU contaminated areas at KTA are being suitably managed but the management plan should be formalised in writing New Action 53.1 - To produce a 'Management and Remediation' plan. New Action 53.2 - to discuss with the replacement of a suitable contamination survey instrument. stated that although these areas are dontaminated with DU they are not a health hazard as such however it is necessary to keep people out of for management reasons. stated that we need to keep people informed but how do we want to deliver this? added that he has not yet arranged a meeting with Environmental Group suggested that as we are content with how the contaminated land at KTA is managed he could send a letter to detail outlining why he is of this opinion and suggesting a meeting for 2 years time unless there is anything that the Scottish Environmental Group wants to raise, if this is the case he would be happy to visit them and discuss the issue New Action 53.3 - to write a letter to the Scottish Environmental Group. Eskmeals Report

6.

gave a presentation on VJ Battery.

3

This project is principally a radioactive process and is regulated under the Ionising Radiation Regulations 1999 and the Radioactive Substances Act1993 It is overseen by the QinetiQ Radiation Advisor and the Environment Agency Inspector, However it is also designated as a CDM site under the Construction (Design and Management) Regulations 1994, this aspect is managed by Amec and the QinetiQ appointed CDM coordinator. QinetiQ must also comply with the regulations put into force under the Environmental Act 1995 and therefore have had to complete an environmental impact assessment and a Site Waste Management Plan (SWAMP). Internally the activity was also scrutinised by the QinetiQ Hazardous Activity Sub Board and has been accepted as safe to continue under the health safety and environmental management of QinetiQ Eskmeals.

The project is managed as follows. QinetiQ is the main contractor and owner of the controlled area. Therefore the QQ VJ Facility Manager is the radiation protection supervisor for the controlled area as defined by the IRR99, this involves control of access and egress, radiological monitoring of the working environment, personnel, equipment and the release of materials, items and personnel from the controlled area.

Amec are the sub-contractor and carry out all of the radioactive waste processing which means they are the owner of the process. The process is to take the catalogued items of radioactive waste from the various stockpiles within the controlled area, carry out a radiological characterisation, size reduce it for handling and fake it into the process area for decontamination (DC). There are various DC techniques employed:-

- shot blasting
- scrabbling
- dismantling
- cutting
- abrading

Due to the nature of this work all of these procedures have the potential to release and spread radioactive contamination so each aspect of this process is contained within its own ventilated enclosure with HEPA filtration and air sampling. AMEC and QinetiQ carry out independent radiological sampling to ensure that containment is satisfactory.

As part of their process Amec have their own screening strategy for the segregation of free release materials (FRM) from contaminated Low Level Radioactive Waste (LLW). QinetiQ, however as the site operator is the final authority for release therefore the QQ RPS ensures that his health physics team physically monitors 100% of all FRM and the outer packaging of LLW before it is released from the controlled area. As part of this control system all "cleared" material is designated as either free release, meaning it is released without restriction or conditional release meaning that it is only released for transporting to the LLW repository or Sellafield for further processing. Any FRM not complying with the QinetiQ free release criteria is impounded and returned to Amec for reprocessing.

To date the overall project is going very well and there have been no incidents involving general, radiological or environmental safety. The first consignment of certified FRM in the form of scrap steel left Eskmeals last month. As did several tons of FRM in the form of decontaminated concrete (Pendine) blocks.

As well as working on the current project Amec have put in a proposal for additional work to be carried out. In this proposal AMEC have put forward a plan to carry out a characterisation survey for the structures within the VJ facility that will require decommissioning. This proposal was submitted to the project manager who has passed it to the project manager who has passed it to be a carried and the proposal to be a carried as a carried and the carried and

# 7. Dstl Report

The following report was presented by

A coroner's court decided that DU exposure was more likely than not to be a factor in the death of a Gulf veteran who contracted bowel cancer. Dstl produced a report rebutting the suggestion but there were no MOD witnesses as MOD had believed that the Coroner was dispensing with a jury and had not received a request for a MOD witness. MOD have concluded that, with hindsight, not having a subject matter expert present was perhaps an error. A transcript of proceedings is awaited.

Ministerial and public correspondence focussed on the allegedly extreme risks exposures to DU particulates and to a decision by the Italian Government to award a pension to a Balkans veteran whose death was reported (in the media) to be due to DU exposure.

A New York court dismissed a claim for compensation for DU exposure made by several US National Guardsmen and a US congressional committee concluded that DU was not likely to be a factor in any non-cancerous effects in Gulf veterans.

Dstl provided some unclassified information to a UK company involved in range clearance in the Gulf and there was progress on the Phalanx disposal mentioned previously.

US research similar to that carried out by the MOD DU Oversight Board found no detectable DU in veterans without embedded DU fragments and concluded that any DU-related health effects in this group were unlikely. Furthermore, past delays in sampling were unlikely to have resulted in any significant loss of data. No clinically significant uranium-related health effects other than subtle changes in biochemical markers relating to renal function were observed in 15 years of follow-up of veterans, including some with retained shrapnel and substantially elevated uranium in urine levels. In general, it is rare to find veterans who have uranium in urine concentrations outside the normal range. Finding detectable levels of DU in the urine is even rarer.

MOD are awaiting information on the nature and scope of the Iraq Inquiry announced by the Prime Minister. The possibility of DU-related queries has been noted.

### 9. Any other Business

New Action 53.4 - to put some timelines against future actions.

# 10. Date of next meeting

The next meeting will be held at 10:00 hrs on Tuesday 26th Jan 2010 at Famborough.

Distribution: All present+

MoD Directorate of Safety and Claims SSD&C

File ESK/327/001

14/11/2009

### **Summary of Outstanding Actions**

Action 52.1 - to draft a paper for the next meeting for members to review giving details of the findings of the review of the trial file.

Jan 2010

Action 52.2 — to bring a draft standing order to the next meeting which will be extended to include timeline.

Jan 2010

Action 53.1 – to produce a 'Management and Remediation Plan" for the DU contaminated areas at KTA.

Jan 2010

Action 53.2 – to discuss with the replacement the radioactive contamination monitor.

Dec 2009

Action 53.3 - Most to put together a draft letter for IR to send to manufacture at the Scottish Environmental Group.

Dec 2009

Action 53.4 - to put timelines against future actions. Dec 2009

