

# Minutes of Meeting

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| <b>Client</b>   | UKAEA  | <b>Client Reference</b>                      | 3000033273             |
| <b>Our Reference</b>                                    | 14731  | <b>Issued By</b>                             | Daren Luscombe         |
| <b>Issue Number</b>                                     | 01   | <b>Issue Date</b>                            | 4 September 2007       |
| <b>Meeting Date</b>                                     | 14 August 2007   | <b>Location</b>                              | Pentland Hotel, Thurso |
| <b>Present at Meeting</b><br>(Distribution Copies)      | <b>Steering Group:</b><br>Bill Fernie<br>Prof. Iain Baikie<br>Ian Clark<br>Rick Nickerson<br><br><b>Consultant Team:</b><br>Daren Luscombe<br><br><b>Observers:</b><br>Paul Dale<br>Phil Cartwright<br>Martin Howse<br>June Love<br>June Macgregor |  |                        |
| <b>Apologies for Absence</b><br>(Distribution Copies)   | John Thurso  | MP for Caithness, Sutherland and Easter Ross |                        |
| <b>Additional Distribution</b><br>(Distribution Copies) | UKAEA website  |  |                        |
| <b>Project Name</b>                                     | Particles BPEO Consultation  |  |                        |
| <b>Subject</b>  | <b>EXTERNAL CONSULTATION STEERING GROUP MEETING</b>  |  |                        |

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## Actions

### 1. INTRODUCTIONS, APOLOGIES AND AGENDA

Apologies were received from John Thurso.

Rick Nickerson noted that he was attending in the capacity of a consultant for KIMO UK and not as a Shetland Councillor.

The agenda was accepted.

### 2. MINUTES OF THE LAST MEETING

Page 2 - IB noted that the update on particles issues had not been regular but had taken the form of a three hour meeting with Joe Toole and Martin Howse on 13 August 2007

and that he was happy with the information he had received.

Noting the above, the minutes were approved.

Review of actions:

| Action   | Who | Status  |
|--|-----|---|
| Write to Fred Barker to thank him for his contribution to the ECSG   | JL  | Complete  |
| Consider the following regarding the consultation materials' content: <ul style="list-style-type: none"> <li>The geographical extent should be represented visually using maps</li> <li>The timescale of the various options should be noted</li> <li>Option screening and combined option screening matrices should be integrated.</li> </ul> | MH  | Complete  |
| Arrange for early promotion of the exhibitions and inclusion of Orkney press in the communications strategy.   | JL  | Complete  |
| Co-ordinate stakeholder mapping and communication with national stakeholders regarding preferred engagement process.   | MH  | Complete  |
| Add Highland Council exhibition to the programme.  | MH  | Following investigation, HC stated it did not host exhibitions at council meetings; however, Counsellors receive information and are on stakeholder the distribution list |
| Ensure Orkney Islands Council are invited to participate in a workshop.  | MH  | Complete  |
| Coordinate the DSG workshop with a DSG meeting.  | MH  | Complete  |
| Coordinate targeting of Schools and Youth workshop participants.   | MH  | Complete  |
| Clarification of UKAEA BPEO weighting process.   | MH  | Complete (clarified in post meeting note in previous minutes)   |
| Redraft questionnaire  | DL  | Complete  |

### 3. STAGE THREE CONSULTATION OUTCOMES

#### 3.1 Dounreay Particle Advisory Group

DL summarised key points of the consultation process and outcomes:

- Four exhibitions were held in Thurso, Reay, Wick and Castletown with 70 attendees mainly in Thurso and Reay. Eight workshops were held, six

<sup>1</sup> 1 = Onshore monitoring with recovery plus offshore monitoring without recovery (the current management approach), 2 = Onshore monitoring with recovery plus offshore monitoring with recovery, 3 = Onshore monitoring with recovery plus targeted recovery of detectable individual particles offshore.

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locally and two further workshops in Inverness and Edinburgh with a total of 63 attendees. Questionnaires returns totalled 70.

The main discussion points at the workshops were technical discussion of particles, the BPEO process, criteria related questions, option combining related questions, the risks presented by particles and the effects of particles (i.e. on tourism and visitors perceptions).

The key messages taken from the exhibitions and workshops were that:

- Environmental criteria are the highest ranked;
- Social and economic criteria were next highest ranked, particularly for local stakeholders;
- Views on health and safety criteria presented a mixed picture with local stakeholder groups generally ranking the criteria lower than stakeholder groups comprising non-locals;
- Technical performance criteria were ranked moderately;
- The cost criterion was ranked the lowest however, stakeholders indicated that there are thresholds above which they would not be prepared to go and they would expect costs to be proportionate to benefits; and
- Options 1, 2 and 3<sup>1</sup> consistently scored the best, whilst options with restrictive access or major environmental or social and economic impacts scored poorly.

There was good feedback regarding the process, materials and approach from the workshops, exhibitions and newsletter.

Referring to the draft preliminary BPEO report (rather than consultation report) IB made the following comments:

- Table 7: the descriptions and diagrams of the options made available to stakeholders need to be included
- That a comparative table with any differences between the options presented for consultation and those proposed in the BPEO is provided; and
- The end state needs to be defined for proposed options. A table stating the end states for each option should be included.

**1) Action: MH to include option descriptions, comparisons and end states in the preliminary BPEO report.**

IB asked if it was appropriate to define the end state in the preliminary BPEO. PC replied that he believed it would be helpful if intentions could be defined.

RN asked if the people who attended the workshops did so as individuals or as part of an organisation and did it influence their discussion. DL noted that stakeholders

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responded in the role they chose (e.g. member of public, contractor, hotel owner, local authority).

RN asked if the workshops understood the meaning of the criteria groups. DL noted that PC had provided descriptions of the criteria groups at the beginning of the workshops and that clarification was made through discussion. RN believed that the criteria descriptions need to be included in the Entec report. RN had further comments he wished to make on the Entec report. DL asked RN to provide his comments on the report (post meeting note: comments were discussed by telephone on 20 August 2007).

**2) Action: RN and DL to discuss comments on the Entec report and DL to consider comments and re-issue report.**

IB asked if there were differences between the views of local and non-local stakeholders. JL noted that whilst there were differences regarding criteria ranking (e.g. social and economic criteria generally being ranked higher by local stakeholders), Option preference was consistent between local and non-local stakeholders.

RN noted that he considered the questionnaire results a ‘barometer’ of opinion and should not be dismissed.

IB noted that he was delighted that the outcome of the consultation had arrived at reasonable recommendations regarding option preferences of Options 1, 2 and 3. IB felt that required endpoints could have been consulted on further. DL noted the work carried out in 2006 that asked stakeholders about their vision for the outcome that provides a steer for end state outcomes.

RN asked how all the documents relating to the BPEO would be tied together. JL noted that the BPEO will reference all documents.

#### **4. UPDATE ON ISSUES**

The quarterly Particles Progress Report was presented to the meeting. It was noted by RN and IB that the section 2a of the report should list the definitions of ‘significant’, ‘relevant’ and ‘minor’ particles as people will be reading the document without knowledge of the Dounreay Particle Advisory Group (DPAG) report. PC briefed the meeting on particles progress.

**Offshore work:** a final season of offshore mapping to further improve the understanding of the extent of particle contamination offshore was completed with 69 particles being mapped.

RN asked if any particles were being retrieved at the moment. PC replied that the particles were being monitored and their positions mapped. Divers were on standby on the boat to retrieve any ‘significant’ particles detected close to Sandside during the mapping process.

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**Cameras into risers:** it has been possible to insert a camera into a riser connected to the diffuser chamber. It is intended to carry out further work, to insert a radiation detector into a riser.

**DPAG report:** gaps in information have been identified with DPAG. UKAEA is working with DPAG to issue DPAG's 4<sup>th</sup> report in 2008.

**Particle dissolution:** the results of dissolution trials of 150 particles are to be supplied to DPAG with a report of the first 50 dissolution results to be supplied on 17 August. It will provide a better understanding of the effects of ingesting a particle. IB asked if particles are toxic if they dissolve in the gut. PC said he would need to refer to medical professionals to answer the question.

IB asked why particle density measurements were being conducted. PC explained that it was to be used in further review of potential particle transport mechanisms as requested by DPAG. IB asked if UKAEA had a proven transport model that could be relied upon. PC explained that before now DPAG were unclear what ranges the particle densities fell into.

**Dounreay foreshore rock investigation:** two geology professors from DPAG visited the Dounreay foreshore to check the condition of the rocks as they are believed to be the same type as the rocks offshore between the old diffuser chamber and the seabed. Results from their tests are currently being reviewed.

**Committee on Medical Aspects of Radiation in the Environment (COMARE) beach trials:** COMARE carried out beach trials at Dunnet beach on 23 and 24 June to test the monitoring vehicles under realistic conditions. The data will be published in late August.

**Beach monitoring:** there was no monitoring of Sandside Beach from the end of March until 8 August due to access being withdrawn in this period. Monitoring of Dunnet beach, Peedie sands, and Melvich beach are complete with no particles detected. A particle was detected and retrieved on Murkle beach during April 2007.

IB commented he was concerned about the find on Murkle beach and asked if there was a transport route for particles to Dunnet. PC said it probably had a different transport mechanism, with density work confirming that Dounreay Fast Reactor (DFR) particles have a higher density than Materials Test Reactor (MTR) particles. The particle at Murkle was an MTR particle. PC stated that he was confident that the monitoring equipment would detect particles of issue to human health.

**Particles Technical Résumé:** the document has been revised and is available on the UKAEA website.

**Signage at Dunnet Beach:** the Highland Council signs have been taken down at Dunnet beach, the private landowners signs are still in place. IB commented that it was important to have good signage, which used plain English, to support the Highland Council so that people can make an informed decision about using the beach.

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### 3) Action: MH to provide redraft by the end of September with revisions.

IB raised a series of issues for consideration by UKAEA:

- Any end states need to be defined in terms of location, activities of particles and duration of the project;
- A map, updated on an annual basis, indicating all particle finds with activities could be made available;
- He would like to see a model for predicting particles locations and activities;
- As there are a limited number of technical personnel working on the particles project, retention and/or development of further staff was essential to manage risks;
- IB considers that it is not possible to estimate that number of particles as per the DPAG report. PD commented that the DPAG estimate is well-founded and that much empirical data had been used to arrive at the estimate;
- IB asked if the sand around the particles was recovered and tested and if it was contaminated. PC said that a small quantity of sand was recovered with a low activity. BF asked about the effect on human health. PD replied that the effect was negligible;
- BF commented that the notification when a new particle is found is harder to find than it used to be. JL noted that it was reported in local press and in the Dounreay bulletin and the particle finds table on the UKAEA website is updated regularly;
- IB asked about the targets for particle retrieval. He believed that there should be a larger budget and offshore robotic retrieval should be explored. PC replied that robotic development had been considered but discounted at this time. He said that another system was being trialled in the next few months;
- IB suggested that the cost per particle retrieved or cost per Becquerel of activity removed could be presented and combined with targets and objectives for the BPEO programme.

## 5. PRELIMINARY BPEO

A working draft of the preliminary BPEO was discussed. There was concern regarding Chapter 7 on offshore monitoring and retrieval. RN was concerned that in the BPEO it states that particles will be retrieved for three years and this was different from what was consulted on. MH said that although 100 years was first chosen because this coincided with three half lives of particle, this was not logical

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because the rate of clean up will be reasonably rapid. IB said that he understood the logic but this was not stated in the BPEO. IB said that he believed that Section 7.2 of BPEO should be rewritten to take the emphasis away from three years and that timelines should be kept more general to provide flexibility.

The group were concerned about the area covered by the monitoring. BF said he was worried that the area only covered 60 hectares between Strathy Point and Brims Ness. DL noted that some stakeholders expressed the view that efforts should concentrate on the highest concentration of particles. RN thought it would be helpful to have a map of the area showing the 60 hectares.

IB asked if SEPA were going to identify targets in the monitoring programme. PD said that SEPA would require UKAEA to be an intelligent customer and propose a programme to SEPA. SEPA will review the proposed programme and provide comments.

RN noted that only 1 in 10 particles will be subject to analysis. He asked what would happen if 2 in 10 particles were 'significant'. PC replied that both would not be analysed as the analysis is based on numbers not activity. IB was concerned that not enough particles would be analysed.

IB thought that Table 6 was in the wrong place in the document and should be moved and that section 5.8.8 should not sit in the consultation section.

The group requested that Chapters 6, 7 and 8 be rewritten making explicit how the outcomes of the stakeholder consultation have been integrated and any differences in the Options presented in the consultation to those proposed in the BPEO.

**4) Action: MH to rewrite Chapters 6, 7 and 8 taking into account the above comments and those from action 1 above.**

DL requested that the group write a draft foreword for the BPEO. RN asked if the foreword was to endorse the BPEO. DL replied that it was to comment on the consultation process. IB volunteered to draft the foreword and send it to JL who will collate comments from the rest of the group and distribute for final comment before 31 August.

**5) Action: IB to write draft foreword and send to JL.**

**6) Action: JL to collate comments and feed back to IB and the group.**

## **6. CONSULTATION ON THE PRELIMINARY BPEO**

DL presented the proposed Stage Four of the consultation. RN asked if Entec or UKAEA would be carrying out the consultation and if it would be the final stage that the ECSG will scrutinise. DL confirmed that Entec will compile and summarise the comments and it would be the final stage the ECSG group will scrutinise. RN said that it was crucial that the people involved in the workshops have the opportunity to comment. JL noted that the summary BPEO document would be sent out to them

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which would signpost to the full BPEO on UKAEA website.

BF commented that SEPA's response would be very important. PD replied that SEPA could reject the BPEO if it did not suitably address environmental issues.

RN asked what the Health and Safety Executive's (HSE's) involvement would be. PD noted that SEPA will consult with HSE.

RN asked if the ECSG would see the summary before it goes out. JL replied that they would. PC said that as the timescale was short the summary document would be sent to the group soon and that comments will be required within two weeks.

- 7) **Action: JL to pre-notify the ECSG of when it can expect the draft and the timescale for comments.**
- 8) **Action: JL to forward the draft BPEO summary for comment to the ECSG.**

A discussion ensued regarding the objectives and approach for Stage Four. The ECSG accepted the proposal as presented.

## 7. DATE OF NEXT MEETING

The date of the next meeting is to be confirmed. The date is likely to be in January to review the post consultation BPEO.

It is anticipated that this will be the final meeting of the ECSG.

## 8. AOB

There was no other business.