



UKAEA
Restoring our Environment

Dounreay, Thurso
Caithness KW14 7TZ
United Kingdom

Telephone 01847 802121

Direct Line: 01847 806000
Direct Facsimile: 01847 806050

Dr Campbell Gemmill
SEPA Corporate Office
Erskine Court
Castle Business Park
STIRLING
FK9 4TR

21 March 2006

Your Reference: CG/PD/JW/DC ORG13-A1780
Our Reference: D/SEPA/3366N

Dear Dr Gemmill

PARTICLES BPEO CONSULTATION

I refer to your letter of 26 January 2006 with comments on the above and would like this opportunity to reply to your specific points.

UKAEA would like to apologise unreservedly for not having been able to give SEPA and DPAG sight of the technical résumé before it went on to the UKAEA web site. This was due to tight time constraints and I have apologised to the DPAG chairman for this oversight. The technical résumé is intended to be a living document and will evolve over time as more information is gained or research is carried out. I will endeavour to ensure that all future documentation concerning the Particles BPEO Consultation is made available to stakeholders for independent commentary before it is published on the web site.

No decisions are being made on a remediation option at this stage of the consultation and stakeholder engagement has been limited to identifying options (whether feasible or not) and what attributes should be used to assess the feasibility. Only feasibility assessments were included in the options and attributes document, so screening has not occurred and therefore no options have been ruled out. The feedback from the early engagement of stakeholders has identified a number of further options and UKAEA will consider these new options for feasibility.

The next stage of the Public Consultation, where the consultation material will be developed and UKAEA will invite the stakeholders to a series of public workshops, will not take place until the publication of the DPAG Definitive Report and the HPA Module 6, as agreed with stakeholders.

With regard to the two Particles Newsletter documents on the UKAEA website, the differing figures on particle numbers in the offshore populations reflect the differences in the research to date. The original document published in 2003 gave a best estimate of 50,000 particles in the seabed close to

Dounreay and the Newsletter published in 2005 stating 10,000 particles, reflected the greater knowledge gained from offshore diving and repopulation studies. This figure of 10,000 particles is an estimate of the particles remaining within a 2 km radius of the old diffuser and this figure may be further refined as research is updated. In any discussions with the public at exhibitions and outreach meetings it was made clear that the total number of particles in the marine environment was not known and that it may be orders of magnitude higher than 10,000. In any future publications, UKAEA will make clearer the uncertainty in the prediction of particle numbers and refer to the geographical boundaries that the estimate is based on.

The area under consideration for the BPEO was considered to be between Sandside Head and Dunnet Head as the evidence to date has shown the boundary for particle presence to be between these two areas. The geographical boundary will be revised before the full consultation is carried out to include a northern boundary offshore. If at this time the evidence relating to the east - west boundary is thought to be inappropriate, it will be revised. The ROV mapping programme provides for surveys to delineate the particle plume and look at areas where modelling predicts particle/sand deposition.

The decision to carry out stakeholder engagement in January 2006 was made when the publication date of the HPA final report was expected in October 2005 and it was assumed that this document would be available to be used in the Technical Résumé. Unfortunately this report was not available hence other sources of information on risks associated with particles were utilised in the production of the Technical Résumé. In our publications and at the exhibitions, we stated that new reports were expected and these would be taken into consideration as we progress. Now that the risk assessment commissioned by SEPA is available, UKAEA will use this as the source document for discussions on hazard and risk and the Technical Résumé will be updated accordingly. I will ensure that the technical résumé is amended immediately if you feel that the content is inaccurate or misleading in any way.

With regard to the use of the Groundhog (Mark 1) system, we note your comments and will replace the sentence with "This methodology was found to be robust in use and used a detection technique relating counts in selected energy windows to counts from natural background". If you do not feel this is suitable, please advise us and we will amend this statement accordingly.

The reference to SEPA and DPAG's views on Groundhog Mark 1 are correct and in context. However, it is recognised that further work has been carried out since then on the systems capabilities and that it does not meet the TID in all circumstances. Since the TID did not state that it should meet the targets under all circumstances, it is not strictly valid to say that it was not being met. The systems deployed have been developing just as the SEPA TIDs have been developing. Only fairly recently has it been recognised that probability of detection should be explicitly stated in the TID. We have assessed the performance of Groundhog Mark 1 at our test bed in Harwell and this information has been shared with DPAG. Further information will become available from the Sandside trials in April.

I welcome your comments and all responses to this stage of the consultation will be made available via the website to all interested stakeholders. UKAEA will also be pleased to invite SEPA to participate in full consultation of assessing the best management strategy.

If you have any queries regarding the contents of this letter, please contact Dr Joe Toole, on telephone extension 01847 80 6092, who will be pleased to assist.

Yours sincerely

Norman Harrison

N Harrison
Director, Dounreay

cc Mr N Harrison
Mr A Rankine
Mr C Blake
Dr D Graham
Mrs J Love
Mr C Punler
Miss J Black
Mr F Dennis
Mr J Toole
Miss F Henderson
HoSE Admin