

**DOUNREAY STAKEHOLDER GROUP
ENVIRONMENT SUB GROUP**

DSG/ESG(2009)M004

**MINUTES OF THE DSG ENVIRONMENT SUB GROUP MEETING HELD ON
WEDNESDAY 9TH DECEMBER 2009 AT 1330 HOURS IN THE PENTLAND
HOTEL, THURSO.**

Present: George Farlow Highland Council (chair)
Alastair MacDonald DSG Chair
Chris Jones Dept of Agriculture
Steven Heddle Orkney Islands Council
Ian Webster Buldoo Residents Group

In addition: June Love DSRL/DSG Secretariat
Tony Wratten DSRL, Director of Assurance
Phil Cartwright DSRL (for item 5)
James Gunn DSRL (for item 7)
Roy Blackburn NDA
Roger Wilson SEPA

MINUTES

1. WELCOME AND INTRODUCTIONS

George Farlow welcomed everyone to the meeting. He noted it was Cllr Steven Heddle's (Orkney Island Council) first meeting and asked everyone to introduce themselves for the benefit of Councillor Heddle.

2. APOLOGIES

Apologies were received from:

- Hamish Pottinger Caithness Against Nuclear Dumping
- Rosemary Thompson North Highland College
- Pauline Crow Health Service
- Isobel Swanson Caithness Young Farmers

3. MINUTES OF LAST MEETING

DSG/ESG(2009)M003 refers. The minutes were agreed as a true record. This was proposed by Alastair MacDonald, and seconded by Ian Webster.

4. PROGRESS ON ACTIONS

See appendix 1 for progress on actions.

5. PARTICLES UPDATE

Phil Cartwright, DSRL provided an update. DSG(2009)C0103 refers. Of note:

- The information collated from the summer off-shore clean-up programme has been presented to PRAG(D) (Particles Retrieval Advisory Group (Dounreay)). Members of PRAG were very positive about the work that has been achieved.

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The next meeting will be held on the 17th February and there is a DSG representative (Alastair MacDonald) on the group. By February PRAG will have considered the information in full and it is expected that they will not make any major changes to the DPAG (Dounreay Particles Advisory Group) map at this time. (DPAG defined the map of where the main plume of particles was indicated to lie).

The plan for the next 3 years (subject to funding) will be to cover the remaining 55 hectares of the significant particle plume.

George Farlow asked who will take over responsibility of monitoring in the next 40 years if required. Phil Cartwright responded that he hoped that work done in forthcoming years would allow sufficient information to ensure there was no need for further off-shore work and that the information from beach monitoring meant that this could also cease by 2025. At the PRAG meeting an action had been placed on the Food Standards Agency and Health Protection Agency to look at what they would expect in terms of the number of particles and effect on marine life/human factors criteria to reach a decision on an end-state for the overall particle project. Removal of the fishing exclusion zone would be a significant milestone.

Alastair MacDonald stated that Phil Cartwright should be commended for a job well done.

The secretary noted that she received the full paperwork for PRAG and asked members whether they wished to have them circulated. It was agreed that the secretary would circulate the list of documentation for PRAG meetings and members would request the papers they wish to see in detail.

ACTION: DSG/ESG(2009)M004/A001: SECRETARY TO CIRCULATE LIST OF PAPERWORK FOR PRAG MEETINGS TO ESG MEMBERS.

Ian Webster asked what would happen after 2025 when the decommissioning work was completed. Phil Cartwright noted that there was no plan to eliminate all of the environmental monitoring associated with the site because there will be facilities remaining associated with low level waste disposal facility and intermediate level waste stores and therefore an environmental monitoring programme would need to continue. Phil also noted that SEPA would still have an active role to play in environmental issues of the site after 2025.

Tony Wratten said, leaving aside the beach monitoring as a separate issue, the site as a whole carried out a lot of environmental monitoring (ie testing of fish, rabbits, water samples, air samplers, etc). The programme of environmental monitoring can be quite extensive and consideration was being given to see if the level of monitoring was adequate for the level of activity undertaken at the site (the environmental monitoring regime being set when the site was operational). Studies are ongoing with the ERI and other academics looking at the extent of the existing programme to see whether there is a case to make changes.

ACTION: DSG/ESG(2009)M004/A002: TONY WRATTEN, DSRL TO PROVIDE A PRESENTATION TO THE ESG ON ENVIRONMENTAL MONITORING (CURRENT REGIME AND INTO THE FUTURE).

Roger Wilson, SEPA noted that, with respect to the environmental monitoring, the current site authorisation is quite prescriptive because at the time that UKAEA was

transitioning into a site licence company (DSRL) SEPA had felt the site was not in a position to do a thorough review.

Phil Cartwright re-stated that not every particle would be removed from the off-shore environment however the priority was to target the plume where the high activity particles are known to reside. He did however point out that beach monitoring would continue for some years after the off-shore clean-up was complete, with the current expectation that the programme will reduce and finally cease once this was assessed by experts to be of no further value.

Tony Wratten noted that the new authorisation from SEPA will be appropriate to current activities and will be reviewed regularly. Discussions with SEPA will continue and any changes to the programme will include particles.

Roy Blackburn asked that once the environmental review had been completed and agreement in principle with SEPA had been given would it be appropriate to introduce some of it before the new authorisation was in place. Tony Wratten said that this would be difficult and felt that the site would have to stick to the current regime until the new authorisation had been approved and instigated.

Steven Heddle asked whether DSRL knew what was beyond the main plume. Phil Cartwright noted that since 1997 this had been the subject of considerable research. He indicated that although there had been many areas surveyed that traversed the 30m depth contour, it may be that the sand depth is greater in this area and particles may be buried beyond the detection capability of the equipment. As the particle find contours indicated reducing numbers away from the centre of the plume there has not been extensive surveying in deep water.

On the basis of statistical samples most of the high risk particles are in the near area of Dounreay with lower activity particles residing beyond that. The particle found at Dunnet beach was the furthest found from the site. Some monitoring has been done further out in the Pentland Firth, and along the North coast and no significant particles have been detected beyond the 30 metre depth. Nor has any significant particles been found on the seabed beyond the defined plume. Some relevant and minor particles have been found just past Brims. DPAG's 3rd and 4th report have provided reasoning why that might be.

Steven Heddle asked about media reports referring to seaweed. Phil Cartwright responded that seaweed sampling was part of the environmental monitoring programme for discharges.

ACTION: DSG/ESG(2009)M004/A003: PHIL CARTWRIGHT TO SEND CLLR STEVEN HEDDLE THE DPAG DEFINED MAP OF THE MAIN PARTICLE PLUME (AND WEBSITE LINK TO DPAG'S 4TH REPORT).

The secretary noted that it might be useful for Councillor Steven Heddle to visit the Dounreay site as this was his first meeting and he may find it beneficial. Councillor George Farlow asked to be included on that visit.

ACTION: DSG/ESG(2009)M004/A004: JUNE LOVE TO ORGANISE A VISIT TO THE DOUNREAY SITE FOR COUNCILLORS STEVEN HEDDLE AND GEORGE FARLOW (AND EXTEND TO OTHER DSG MEMBERS) AT A CONVENIENT TIME.

- The study into the old diffuser chamber is now complete and a recommendation for limited remediation of parts of the system will be submitted to SEPA by the 31

December.

- In terms of beach monitoring – the Dounreay foreshore continues to be monitored. Sand on the east side of the foreshore has started to settle in a different area and significant particles have been found. PRAG will be considering the information relating to this.
- The landowner of Sandside beach decided to allow a resumption of monitoring and monitoring resumed in November with 6 minor particles detected and recovered. The December survey has commenced and is scheduled to finish just before the 17th December. A total of 145 particles had been found on Sandside to date (one minor particle had been removed at the start of the December survey). ESG members noted they were pleased to hear that monitoring at Sandside had resumed.

6. OPERATIONAL UPDATES

- DSRL site performance (September) was tabled (see DSG(2009)P028). Tony Wratten noted the following:
 - The fuel cycle area ventilation project is continuing well. Two new stacks have been erected and the ventilation duct and fans have been connected. There have been a few problems with the quality of equipment being bought in and the company who supplied these are in the process of rectifying this. It is expected that within the next few days the fans will be started up to check out the system before it is used for real. It is expected that the new system will be in operation around the end of the financial year which will signify a big improvement to the fuel cycle area.
 - Hazard reduction continues in DFR with the destruction of the liquid metal. One fifth of the hazard has now been destroyed and the performance of the ion exchange plant which cleans up the discharges has been good. It is expected that this project will continue for another 18 months or so.
 - Work to inform the site's discharge authorisation and environmental improvements required by SEPA continues. A number of environmental support documents are required to demonstrate that the site is doing things the right way and three quarters of the work has now been completed.
 - SEPA was currently looking at the waste documentation to identify best practice in terms of characterising the waste.
 - The new discharge authorisation was formally submitted to SEPA at the end of September. SEPA will undertake work to produce a decision point and then will carry out consultation.
 - On the safety front, site performance has been good with no lost time accidents recorded. The site has just been awarded the Sword of Honour by the British Safety Council with only 40 being issued worldwide. This is good news for Dounreay because it is local people (staff and contractors) doing the work. The NDA set high standards for their contractors and this shows that Dounreay is performing well.

Ian Webster noted that the October site performance report had mentioned that Highland Council would soon be updating the site's planning framework. Tony Wratten noted that the site was helping to draft this document and would be happy to circulate this once complete.

ACTION: DSG/ESG(2009)M004/A005: TONY WRATTEN TO CIRCULATE THE HIGHLAND COUNCIL'S PLANNING FRAMEWORK DOCUMENT TO ESG MEMBERS WHEN COMPLETE.

- SEPA report (DSG(2009)P029 refers). Roger Wilson noted the following:
 - Attendance at the last ESG and DSG meeting had not been possible due to other meetings with the NDA.
 - DSRL had submitted an application to surrender the PPC (Pollution Prevention & Control) permit regulating the recovery of uranium metal from uranium containing waste streams as the plant that used to carry out these operations are now closed.
 - DSRL are demonstrating how the site complies with waste authorisation and this is progressing. It is important the project specific plans are produced to ensure that the waste is appropriately specified and measured. This work helps to inform the inventory which in turn informs the safety case.
 - SEPA have requested more information in relation to the low level waste facility. It is expected that this will be provided by October 2010. SEPA continue to meet with DSRL on a frequent basis to ensure that packages of work can be assessed as they are complete. Information is updated on SEPA's website.
 - DSRL continue to investigate how non-radioactive discharges can be improved in quality, eg by fitting package sewage treatment plants.
 - On a more general note, there have been changes made to the legal charging scheme for controlled activities regulations (CAR) which will deliver significant simplification to applications fees and changes to subsistence charges which reflect regulatory efficiencies.
 - SEPA is currently looking at storage of controlling non-radioactive waste for re-use. Currently regulation dictates that after 3 years waste should be moved into landfill and is then subject to landfill tax. Tony Wratten noted that the site was taking legal advice on this to see what can be done. Roy Blackburn noted that NDA also had concerns which could potentially impact on all NDA sites.

Ian Webster asked what the statement on micro-dredging related to. Phil Cartwright noted that the site had a license for dredging to allow the sand to be put back to the sea following the off-shore clean-up work.

- The 2008 RIFE report (Radioactivity in Food & the Environment) has been published. Electronic copies can be found at www.sepa.org.uk/radioactive_substances/publications.rife_reports.aspx.

Ian Webster noted that SEPA had met with the Buldoo Residents Group and many of the questions, relating to Buldoo, had been discussed at that meeting.

- NDA report. Roy Blackburn provided a verbal update, of note:
 - Tony Fountain, NDA Chief Executive, had visited Dounreay and met with the NDA site facing team. He was extremely pleased with the way the site was focussed and with the continued safety record.
 - More generally the funding position for the NDA was being evaluated under the PVP (public value programme). Funding for 2010/11 is not affected but later years will inevitably see a reduction in budget. NDA is working with all its sites to work up different planning scenarios. The PVP is expected to be complete by February 2010.
 - The competition for the Dounreay site has now been formally kicked off. The PIN (prior information notice) has been issued and the next formal stage is issuing the contract notice which will come out in March. The industry event will be in two parts with one part being in Caithness while the 2nd part will be held in either Glasgow or Edinburgh. The date of the Caithness day is now the 5th February 2010.

7. HERITAGE STRATEGY

James Gunn provided an update on the heritage strategy. See DSG(2009)C099 for executive summary of heritage strategy and DSG(2009)C104.

The site was officially launching the draft heritage strategy on the 10th December. A series of presentations were being provided along with a presentation to site staff and contractors. A high school debate on whether the DFR sphere should be saved had also been organised.

Members were invited to read the newsletter and respond to the questionnaire.

ACTION: DSG/ESG(2009)M004/A006: ALL MEMBERS TO DISCUSS WITH THEIR RESPECTIVE ORGANISATIONS AND SUBMIT VIEWS TO THE HERITAGE STRATEGY.

Ian Webster noted that no reference was made to the Vulcan site. James Gunn stated that the heritage strategy had been considered for the Dounreay site only and that the Ministry of Defence would need to consider whether they believed there would be value in doing the same for Vulcan.

Alastair MacDonald noted that there was a lot of emphasis on reactor preservations when there were other ways of retaining the Dounreay story.

8. CORRESPONDENCE FOR NOTING

The Secretary noted the correspondence circulated for noting:

- DSG(2009)C075 was a copy of the Scottish Land Register which showed that NDA has now registered the land. This correspondence was noted.
- DSG(2009)C088 is the briefing material discussed at the Scottish Sites meeting on radioactive substances act and exemption orders. This document is bit

technical and it has been suggested to SEPA (through their policy office) that a pre-meeting to discuss what this actually means for the sites should be held before consultation is held.

- DSG(2009)C091 is a brief from COMARE on the updated investigations of cancer excesses in the vicinity of Seascale and Dounreay. It was noted that while this document outlines new build as a reason for extending the study this does not apply to Scotland. It was agreed that COMARE should be invited to attend an ESG meeting to present their findings once they had completed their study.

ACTION: DSG/ESG(2009)M004/A007: SECRETARY TO INVITE COMARE TO PRESENT THEIR FINDINGS ONCE THE EXTENDED STUDY ON CANCER EXCESSES IN THE VICINITY OF SEASCALE AND DOUNREAY WAS COMPLETE.

- DSG(2009)C092: an invitation from HSE to a pre-consultation on Scotland's bulk quantities and licensing of disposal. Bob Earnshaw attended on behalf of DSG. This was a pre-cursor to the consultation coming out next year.
- DSG(2009)C094: agenda and draft terms of reference for the DSRL/local community liaison group meeting was held on 17th November. This group has been set up as part of the planning conditions for the low level waste facility, primarily for Buldoo residents but also has representation from Caithness West Community Council and DSG.

9. **ANY OTHER BUSINESS**

The Secretary noted that Scottish Government had provided a written update for the meeting – for completeness this is reflected below:

- **Scottish Government Updates December 2009**

- **Exemption Order Review**

The review of the Radioactive Substances Act 1993 (RSA93) exemption orders is still ongoing. The initial proposals were put out for consultation in June and that consultation closed on 4 September 2009.

In addition to the consultation two stakeholder workshops (non-nuclear and nuclear) were held in Manchester in July to give those affected by the changes an early opportunity to feedback their views on the proposals. Participants were given an opportunity to highlight any problems they saw with the proposals and then asked to try and find solutions.

A number of concerns were raised at these workshops e.g. the proposals could have a major negative impact upon some NORM (naturally occurring radioactive material) industries, and the appropriateness of the radiological assessment underpinning some of the proposals was questioned.

These issues together with those received as formal responses to the consultation have now been considered carefully and as a result a further smaller consultation exercise will now take place. This will be targeted at specific areas of the industry.

You can view the consultation summary of responses which was published on 04 December 2009 and available at the following link

http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/nuclear/radioactivity/government/legislation/exempt_review/exempt_review.aspx

The current plan is still to implement the new orders and changes to the Act by April 2010.

- **Higher Activity Radioactive Waste**

The Scottish Government will shortly publish a consultation document on the storage and disposal of Higher Activity Radioactive Waste in Scotland.

The consultation will consist of three elements.

- Consultation Document – approximately 96 pages
- Environmental Report – approximately 55 pages
- Supplementary Information Document – 80 pages

The intention is that the documents will be issued as a suite of documents. There will be a twelve week consultation period. Hard copies will be distributed to areas identified one of which is the SSG's

A Scottish Government workshop on the consultation document is planned for 29 January 2010. Further details on the workshop will be issued before Christmas following publication of the consultation

- **Radioactive Contaminated Land Regulation**

During the application of the Radioactive Contaminated Land (Scotland) Regulations 2007 (SSI 2007 No. 179) to radioactive contamination at Dalgety Bay SEPA identified that they do not cover all relevant radioactive substances. The definition of substance as was set down in the Regulations did not include Radon (a naturally-occurring radioactive gas) and its radioactive progeny. As a consequence the determination of the status of the land could not take into account the radiation from these excluded radioactive substances some of which could be radiologically significant. In the case of Dalgety Bay this could mean the difference between being able to designate the land as radioactive contaminated or not.

The Regulations SSI 2009 No. 202 amending the definition of substance to include radon and its progeny came into force on 26 June 2009. The Statutory Guidance to SEPA which completes the regime has been updated to reflect this change to the regulations and to incorporate other minor recommendations identified during the application of the guidance. The Statutory Guidance was issued on 10 September 2009.

DECC is currently drafting the Radioactive Contaminated Land (Scotland) (Amendment) Regulations 2009 so that the change in definition of substance is extended to cover nuclear occurrences.

- **Waste Substitution Consultation Project**

This consultation will be issued in the new year (early January).

It will describe proposals by Government to allow Dounreay Site Restoration Ltd (DSRL), acting on behalf of the Nuclear Decommissioning Authority

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(NDA), to carry out substitution of wastes arising from the reprocessing of spent fuels. The fuels in question were received from overseas customers in the late 80's and early 90's. Changes in operations at the site mean that it is unlikely that all the forms of waste which were originally envisaged will be produced.

There being no further business George Farlow thanked members for attending and closed the meeting.

George Farlow

DSG Environment sub group chair

13th December 2009

APPENDIX 1 – PROGRESS ON ACTIONS

ACTIONS ARISING FROM THIS MEETING

DSG/ESG(2009)M004/A001: Secretary to circulate list of paperwork for PRAG meetings to ESG members. .

DSG/ESG(2009)M004/A002: Tony Wratten, DSRL to provide a presentation to the ESG on environmental monitoring (current regime and into the future).

DSG/ESG(2009)M004/A003: Phil Cartwright to send Cllr Steven Heddle the DPAG defined map of the main particle plume (and website link to DPAG's 4th report).

DSG/ESG(2009)M004/A004: June Love to organise a visit to the Dounreay site for Councillors Steven Heddle and George Farlow (and extend to other DSG members) at a convenient time.

DSG/ESG(2009)M004/A005: Tony Wratten to circulate the Highland Council's Planning Framework document to ESG members when complete.

DSG/ESG(2009)M004/A006: All members to discuss with their respective organisations and submit views to the heritage strategy.

DSG/ESG(2009)M004/A007: Secretary to invite COMARE to present their findings once the extended study on cancer excesses in the vicinity of Seascale and Dounreay was complete.

ACTIONS ONGOING FROM PREVIOUS MEETINGS

M001/A018: ESG to write to Scottish Government and HSE to stress that a date for a decision on whether the low level waste facility should be licensed was given greater priority to allow a decision to be made. *Action ongoing* – Scottish Government have responded as follows: "There are currently actions outstanding arising from the last meeting with HSE and other interested parties which require to be completed but due to other priorities in each of the organisations we have not been able to progress this matter as quickly as we would have wished. The Scottish Government will continue to work closely with HSE and others to progress the issue of licensing facilities such as that planned for Dounreay". [DSG(2009)C098 asks for this action to be closed out as a matter of urgency].

ACTIONS COMPLETED SINCE LAST MEETING

M015/A021: Secretary to put heritage strategy presentation on September DSG agenda. *Action complete* – included in agenda for December meeting

M016/A014: Doug Graham to consider how best to present the information on environmental aspects and the frequency of this report. *Action complete* – this information is being refined and will be available on the Dounreay website shortly.

M001/A005: DSG members to write to MSP to try to affect progress with the Scottish land registry. *Action complete* – The NDA has now registered the land with the Scottish land registry. The process of first registration takes some time in Scotland and given the complexity of this application it is not expected that this will show up on a search of the land registry for the next couple of year. DSG(2009)C075 refers.

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M002/A013: DSRL (Tony Wratten) to provide a diagram to show predicted future discharges. *Action complete – provided with discharge authorisation presentation given at ESG on 16th September 2009.*

M002/A014: DSRL to provide a presentation at next ESG and DSG on the application for new discharge authorisation. *Action complete – presentation taking place at ESG in September and on agenda for DSG meeting on 9th December.*

M002/A016: Secretary to collate all responses to NDA's consultation on low level waste strategy and draft response for endorsement by DSG members before submitting to NDA. *Action complete – response has now been submitted. See DSG(2009)C063.*

M003/A005: Secretary to amend DSG/ESG(2009)M002 with correction identified – Action complete.

M003/A006: Secretary to obtain copy of Government consultation on zero waste and circulate to ESG members to consider response. Action complete – website link circulated to members - <http://www.scotland.gov.uk/Publications/2009/08/19141153/1>.

M003/A007: ESG sub group chair to table congratulations to the workforce and site contractors for achieving a good result on safety performance. *Action complete – this was done at DSG meeting on 16th September 2009.*

M003/A008: Tony Wratten to provide secretary with electronic version of summary information in support of the application for authorisation from Dounreay. *Action complete – document distributed on 7th December 2009.*