

PARTICLES RETRIEVAL ADVISORY GROUP (DOUNREAY)

SUMMARY OF DISCUSSION and RECORD OF RECOMMENDATIONS and ACTIONS

11th MEETING OF THE PARTICLES RETRIEVAL ADVISORY GROUP (DOUNREAY) - 13th and 14th November 2012

DAY ONE: 13TH NOVEMBER 2012

Members Present:

Prof Alex Elliott (Member) – **AE (Chairman)**
 Prof Tim Atkinson (Member) - **TA**
 Dr George Hunter (Member) - **GH**
 Prof Marian Scott (Member) – **MS (PM only)**
 Dr Andrew Tyler (Member) – **AT (Late arrival)**

Dr Paul Dale (Technical Secretary) – **PD (Late arrival)**

Apologies:

Ms Joanne Brown (Observer, HPA) - **JB**
 Mr Hugh Fearn (Observer, SEPA) - **HF**
 Observer, DSG

In Attendance:

Mr Phil Cartwright (Observer, DSRL) - **PC**
 Dr Jim Gemmill (Observer, SEPA) – **JG**
 Ms Anna MacConnell (Observer, NDA) - **AM**
 Mr Martin Macdonald (Observer, SG) - **MM**
 Mr Bill Thomson (Observer, DSRL) – **BT**

Ms Susan Carswell (SEPA, Alternate for Mark Toner) - **SC**
 Mrs June Moore (Administration) – **JM**

| Agenda Item | Summary of Discussion | Recommendation | Action | Status | Target Date |
|--|--|----------------|--------|--------|-------------|
| 1 Chairman's Introduction | The Chairman welcomed all present to the 11 th PRAG meeting, to be held over two consecutive days. He advised the meeting that, due to another urgent commitment, Dr Paul Dale would join the meeting later. Also, Prof Marian Scott and Dr Andrew Tyler both had teaching commitments during the morning and would attend after lunch. | | | | |

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|--|---|--|---|--------------------|--------------------------------|
| 1 Chairman's Introduction <i>(continued)</i> | <p>AE noted that apologies had been received from Ms Joanne Brown (HPA), Mr Hugh Fearn (SEPA) and Mr Mark Toner (SEPA). Ms Susan Carswell (SEPA) was in attendance at this meeting as the nominated alternate for Mark Toner.</p> <p>The Chairman welcomed Mr Martin Macdonald to his first PRAG(D) meeting as nominated Observer from the Scottish Government, and invited round-table introductions from all present.</p> | <p>It was noted that there was to be no HPA Observer present during the two-day meeting.</p> | | | |
| 2 Minutes | <p>The Chairman invited the Group to comment on the draft minute of the previous meeting.</p> | | | | |
| 2.1 Record of Previous Meeting <i>Paper M11/01</i> | <p>The meeting considered paper M11/01, a draft record of the October meeting.</p> | <p>The draft Summary of Discussion and Record of Recommendations and Actions from the meeting held on 24th October 2012 was accepted without amendment.</p> | <p>October meeting minute to be published on the Website. JM</p> | <p>Open</p> | <p>ASAP</p> |
| 2.2 Actions Arising <i>Paper M11/02</i> | <p>In the Tec Sec's absence, the Chairman led the Group through the actions outstanding from the previous meetings.</p> | <p>The outstanding action points in Paper M11/02 were considered and noted as closed, superseded, to be addressed during this meeting, or carried forward as ongoing actions.</p> | <p>Actions carried forward or deferred from previous meetings to be recorded as an appendix to this document. AE & JM</p> | <p>Open</p> | <p>For next meeting</p> |

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| <p>3 Surveys Update – Beaches</p> <p>3.1 Sandside Beach</p> <p>3.2 Dounreay Foreshore</p> <p>3.3 Dunnet Beach</p> <p>+ 3.4 Others</p> | <p>The Chairman invited DSRL to update the meeting on beach monitoring.</p> <p>BT advised that beach surveys had been undertaken ‘as normal’ since the last meeting. A presentation of summary data was provided.</p> <p>BT reported that two <i>minor</i> particles, located in fairly close physical proximity, had been recovered from Sandside Beach last week. BT said he believed that these finds demonstrated that the detection equipment is working well. Determination of the maximum ‘missable’ activity level was discussed.</p> <p>Monitoring of the Foreshore had been carried out, with no particle finds. PC reported that no further progress had been made on the probe survey and this remains an outstanding action.</p> <p>All other beaches monitored to programme with no particle finds.</p> | | <p>DSRL will undertake the probe survey when possible. DSRL</p> | <p>Open</p> | <p>ASAP</p> |
| <p>Late Arrival</p> | <p>Dr Paul Dale joined the meeting at 11:00 am and was welcomed by AE.</p> | | | | |

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| <p>4 Investigation of 'Unusual' Particle</p> | <p>DSRL gave a verbal update to the Group on the results of destructive dissolution analysis of the 'unusual' particle. PC informed the Members that five particles have now been dissolved and provided details of the tests.</p> <p>The process and outline results of the dissolution tests were discussed. PC advised the meeting that the full Lab report was expected during late December.</p> <p>As the meeting considered the interim results, AE suggested that the opinion of a metallurgist would be helpful and asked PC and AM to arrange for this to be commissioned.</p> <p>PC reported that the work requested by the Group to determine whether data could provide a history of triggers similar to the signal of the unusual particle will be more time-consuming and expensive than originally thought.</p> | <p>It was noted that the delay in receiving the information might result in a gap in the Group's end-of-year report.</p> <p>It was recommended that metallurgical assessment on results of dissolution tests be sought.</p> <p>It was noted that this work will require DSRL raising a formal purchase order on Nuvia.</p> | <p>DSRL will circulate the full Lab report to the Group as soon as it becomes available. DSRL</p> <p>DSRL and NDA to obtain the opinion of metallurgist on the test results. DSRL & NDA</p> | <p>Open</p> <p>Open</p> | <p>ASAP</p> <p>Urgently required</p> |
| <p>Offshore Particles: Effects of Wind</p> | <p>AE said it had been agreed previously that information on wind speeds would be useful and invited TA to bring the Group up to date with this issue.</p> | | | | |

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| Offshore Particles: Effects of Wind <i>(continued)</i> | <p>TA gave a brief summary of the history and outlined the further work he had undertaken, arising from discussions at the last meeting.</p> | <p>It was noted that TA's conclusions would be included in the Group's report.</p> | <p>Further work to be undertaken by TA for the report, as agreed. TA</p> | <p>Open</p> | <p>For final report</p> |
| | <p>PC provided a verbal report on DSRL's further examination of wave height time series data. Results were based on average daily wind speeds of 15 miles per second. Following discussion, PC proposed that the data search should be widened to include the effect of a build-up of wind speed sustained over several consecutive days within the range of 12 miles per hour.</p> | <p>It was recommended that DSRL continue to look into the available data and to liaise with TA to identify what could be extracted.</p> | <p>DSRL and TA agreed to continue with this work and look into the wider wind dataset. DSRL & TA</p> | <p>Open</p> | <p>For final report</p> |
| | <p>The impact of the wind data on the various iterations of Wallingford models was noted.</p> | <p>The impact of the wind data on the various iterations of Wallingford models was noted.</p> | <p>DSRL agreed to extend the range of the search to include wind speeds of 12 miles per hour.</p> | <p>Open</p> | <p>For final report</p> |
| | <p>The potential for particle disturbance and fragmentation associated with storm wave impact was discussed at length. Arising from the discussion and exchange of views, it was suggested that it might be helpful to know when the risers were reported as "not visible" during a routine diving inspection.</p> | <p>It was noted that this issue would be addressed in the Group's final report to ensure that the implication of wind speed on potential particle dispersion or fragmentation has been fully explored during the Group's deliberations.</p> | <p>DSRL agreed to check on the height of the anemometers on site, and also data obtained offshore. DSRL</p> | <p>Open</p> | <p>For final report</p> |
| | <p>The discussion included the reiteration of information already available on inspections carried out on the old diffuser, the sludge from the diffuser, the risers themselves and in the vicinity surrounding the risers, where nothing of any significance had been found. The potential depth and density of sediment was considered.</p> | <p>It was suggested that, although there had been some indication of caesium in the rock surrounding the risers, the Group did not believe that, at this time, there is anything that will 'refresh' the plume.</p> | <p>DSRL agreed to check the date of the occurrence when the risers were not visible to divers during a routine inspection. DSRL</p> | <p>Open</p> | <p>ASAP</p> |

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| Late Arrival | Dr Andrew Tyler joined the meeting at 1:35 pm and was given a brief overview of the business covered during the morning. | | | | |
| 5 Group's Final Report to SEPA and DSRL 5.1 Offshore Particle Recovery | <p>The Chairman invited Members to consider the draft format for chapter sections and suggested content of the Group's final report.</p> <p>The Chairman invited DSRL to update the meeting on the offshore monitoring data. BT led the Group through the data produced, including a plot showing all of the <i>significant</i> particles found offshore by both divers and ROV's. A discussion ensued about the presentation of the information now available and various options were considered.</p> | <p>During the discussion, it was recommended that images showing the particles detected during a single pass would be useful for building up a history of re-population areas.</p> <p>It was noted that it would be helpful to look at the build-up of re-population areas by particle category, for comparison against a plot showing all finds.</p> | <p>DSRL agreed to provide this data to the Group. DSRL</p> <p>DSRL agreed to work on producing this information. DSRL</p> | <p>Open</p> <p>Open</p> | <p>ASAP</p> <p>ASAP</p> |
| Late Arrival | Professor Marian Scott joined the meeting at 2:00 pm | | | | |

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| <p>5.1 Offshore Particle Recovery (continued)</p> | <p>Consideration was given to producing a plot showing depth of recovery for <i>significant</i> particles (only). AT suggested revisiting the Fits data. PC was uncertain whether DSRL still has this data and, even if it is available, whether it would be compatible with the DSRL imaging system.</p> <p>PC reported that work had been undertaken on the over-lap and re-monitoring information and led the Group through a presentation of the various maps and images produced. An extensive discussion accompanied the dissemination of all the information provided by DSRL. The possibility of ‘sorting’ some of the information by depth of recovery was considered. AE stated that because the <i>significant</i> particles can be detected to greater depths and more reliable at shallower depths, it might be useful to have this data for <i>significant</i> particles only.</p> <p>Further discussion followed regarding possible clarification of particle dispersion along the plume and a potential discrepancy in predicted populations.</p> | <p>The Group noted that the images and diagrams produced by DSRL contained valuable data.</p> <p>It was also noted that DSRL believe that the depth data are the least reliable in the dataset.</p> | <p>It was agreed that DSRL would look into the possibility of providing this data. DSRL</p> <p>DSRL agreed to try to extract depth information, as discussed, from the data available on the system. DSRL</p> <p>It was agreed that DSRL would compare the depth of recovery of approximately 12 particles from both ends of the plume – for <i>significant</i> particles only.</p> | <p>Open</p> <p>Open</p> <p>Open</p> | <p>ASAP</p> <p>ASAP</p> <p>ASAP</p> |
| <p>6 Dounreay Authorisation</p> | <p>The Chairman invited the Group to consider making recommendations on the beach monitoring programme, as revised in the SEPA Consultation document.</p> | | | | |

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| <p>6 Dounreay Authorisation <i>(continued)</i></p> | <p>The current and proposed programme of monitoring for all beaches was discussed. During the discussion, JG clarified SEPA's proposal to issue new authorisations to cover decommissioning work and the potential programme for monitoring beaches for particles. He explained that all other types of environmental monitoring are covered separately by the site's BPM requirement under the authorisation.</p> <p>Following further discussion, JG informed the meeting that SEPA hopes to issue new authorisations early in 2013, possibly by the end of the FY. The Group considered various monitoring options, including continuing with the current survey regime for Sandside until the end of Stage 1, which might provide verification that any mobilised particles are not migrating to Sandside beach. It was suggested that one original survey and five replicates might be required on Sandside, undertaking monitoring until September 2016.</p> <p>The frequency and area of monitoring of the Foreshore was considered and the Group suggested that continuation of fortnightly monitoring is desirable, when accessible, with the potential for</p> | <p>It was agreed that the Group's view would be conveyed in it's response to SEPA. This would include PRAG's recommendations for the frequency, duration and reasons for monitoring, or discontinuation of monitoring, of all beaches.</p> | | | |

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| <p>6 Dounreay Authorisation <i>(continued)</i></p> | <p>survey gaps of 3/4 months of the year during which it is not possible to undertake monitoring due to the bird nesting season.</p> <p>Following further deliberations, it was suggested that the only other monitoring required might be at the east and west 'sentry' areas, with surveys carried out twice-yearly on Murkle and Melvich beaches. The Group considered that indications of seasonal 'peaks' suggested that monitoring undertaken during May and November could prove to be the most beneficial, and this should continue until at least the end of September 2016, or if the authorisations are issued to the expected timescale, to the end of Stage 1, whichever is earliest.</p> <p>The significance of utilising the current surveying techniques for future monitoring regimes was raised by MS. The possibility of using different surveying equipment reflecting future engineering or scientific developments, and/or potential modifications to facilitate detection of 'unusual' particles, was considered by the Group.</p> | <p>It was agreed that the Foreshore is a 'sentry' for monitoring particle arrivals and is an important indicator of any decline in particle activity.</p> <p>It was agreed that the Group would advise the continued use of current monitoring techniques. However, if the survey equipment is changed for any reason, it would be recommended that both systems have to operate and overlap for a sufficient period of time to enable comparative performance to be established.</p> | <p>Following consideration of the future requirement, frequency and extent of beach monitoring, AE agreed to submit the Group's consensus view to SEPA. It was also agreed that the Group's recommendations would be fully justified in the Chairman's written PRAG response to the Consultation document.</p> <p>AE</p> | <p>Open</p> | <p>By due deadline (30 Nov)</p> |

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| <p>7 Preparation of Group's Final Report to SEPA and DSRL</p> | <p>The Chairman invited PD to address the meeting on chapter content headings. PD outlined the criteria for the final report: a concise report on the work undertaken by PRAG and DSRL and the potential future consequences. He announced that, at the request of MS, the timescale for submission of the report has been extended to the end of the FY; 31st March 2013.</p> <p>GH reported that he had prepared a draft summary of headings for the chapter on the 'unusual' particle and this was presented on-screen for the Group's consideration.</p> <p>GH raised the issue of an appropriate descriptive terminology for this 'unusual' particle and the possibility of referring to "gamma-poor" or "beta-rich" particles was considered.</p> <p>During the ensuing discussion, the Group were advised that this particle was detected as the operators were investigating 'false positives'. AE suggested that the request for Nuvia to undertake a data trawl to identify any similar discrete or background triggers, and the number of incidents of operator halts to investigate such signals, should be deferred until a metallurgical report is available.</p> | <p>It was noted that the final report of the Group is required by the end of March 2013.</p> <p>It was noted that further work on this chapter may be delayed, pending receipt of the full lab report.</p> <p>Amendments to the draft outline chapter were noted by GH.</p> <p>It was recommended that DSRL delay commissioning Nuvia's work, pending a metallurgist's analysis of the particle.</p> | <p>It was agreed that GH and AE will liaise on content of this chapter and the Introduction section. GH & AE</p> <p>GH agreed to undertake further work on this chapter, with input from TA and AT. GH, TA & AT</p> | <p>Open</p> <p>Open</p> | <p>For final report</p> <p>For final report</p> |

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| 7 Preparation of Group's Final Report to SEPA and DSRL <i>(continued)</i> | The Group discussed the best method and equipment which might be used for detecting this type of particle. | It was noted that the Groundhog system appeared to be the most efficient current method of detecting beta-rich fragments in a beach monitoring situation. | | | |
| 8 Any Other Business | There were no items raised under any other items of competent business for today's meeting. | | | | |
| 9 Chairman's Summary for Close of Day One | The Chairman invited the Members to consider, overnight, the diagrams they would require in support of their chapters, to enable DSRL to produce the images for inclusion in the final report. AE thanked all present for their contributions and closed the meeting. | It was noted that MM conveyed his thanks to the Group for its invitation to attend this meeting. | | | |

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SUMMARY OF DISCUSSION and RECORD OF RECOMMENDATIONS and ACTIONS

11th MEETING OF THE PARTICLES RETRIEVAL ADVISORY GROUP (DOUNREAY) - 13th and 14th November 2012

DAY TWO: 14TH NOVEMBER 2012

Members Present:

Prof Alex Elliott (Member) – **AE (Chairman)**
 Prof Tim Atkinson (Member) – **TA**
 Dr George Hunter (Member) – **GH**
 Prof Marian Scott (Member) – **MS**
 Dr Andrew Tyler (Member) – **AT**

Dr Paul Dale (Technical Secretary) – **PD**

Apologies:

Ms Joanne Brown (Observer, HPA) - **JB**
 Mr Hugh Fearn (Observer, SEPA) - **HF**
 Dr Jim Gemmill (Observer, SEPA) – **JG**
 Mr Martin Macdonald (Observer, SG) - **MM**
 Observer, DSG

In Attendance:

Mr Phil Cartwright (Observer, DSRL) - **PC**
 Ms Anna MacConnell (Observer, NDA) - **AM**
 Mr Bill Thomson (Observer, DSRL) – **BT**

Ms Susan Carswell (SEPA, Alternate for Mark Toner) - **SC**

Mrs June Moore (Administration) – **JM**

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| 10 Chairman's Introduction (Second Day) | <p>The Chairman confirmed the agenda for today's meeting, based upon progress and considerations during the previous day.</p> <p>It was agreed, at GH's request, that Item 6 would be raised again and discussed further, before the meeting commenced today's agenda.</p> | | | | |

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| 6 Dounreay Authorisation <i>(continued)</i> | <p>Further clarification was provided by PD on the scope of SEPA's authorisations and current beach surveys. Following a wide-ranging discussion on monitoring regimes, it was suggested that PRAG's view was generally supportive of the proposals encapsulated in SEPA's consultation document. It was acknowledged that the extensive information and data obtained to date have been accrued during routinely changing situations, i.e. using different equipment and evolving detection techniques.</p> | <p>It was agreed that PRAG is supportive of the approach taken by SEPA in assessing the risks of encounter on Sandside beach, on the grounds of public health protection.</p> | <p>AE to incorporate this view into the Group's response to the Consultation document. AE</p> | <p>Open</p> | <p>By due deadline (30 Nov)</p> |
| 11 Preparation of Group's Final Report to SEPA and DSRL 11.1 Introduction | <p>AE presented a Powerpoint draft of his chapter contents for the Introduction section. This was considered and discussed by the Group and various amendments were incorporated to the text live on-screen. AE advised the meeting that he considered that a large-scale map of the overall area, with insets of individual relevant beaches, was required. A second map showing the location and activity of all particles recovered could also be used in the first chapter.</p> | <p>It was recommended that an updated map of all beaches provided by DSRL, with insets of Murkle and Dunnet beaches, be used in the first section of the chapter.</p> <p>It was also recommended that a large-scale map illustrating all monitored finds should feature in this chapter.</p> | <p>DSRL agreed to produce draft maps and images as discussed and requested for AE's consideration, with direct input from AE. DSRL</p> <p>AE agreed to incorporate the various suggestions discussed into the chapter and work with DSRL on maps and images required. AE + DSRL</p> | <p>Open</p> <p>Open</p> | <p>ASAP</p> <p>ASAP</p> |

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| <p>11 Preparation of Group's Final Report to SEPA and DSRL</p> <p>11.1 Introduction <i>(continued)</i></p> <p>11.2 Beach Monitoring</p> | <p>It was suggested that a section on the significance of wind effect, as captured by Prof Harris in DPAG's 4th report, could be considered.</p> <p>Following further discussion and various suggestions from the Members, AE to amend and develop this chapter for final consideration at the next meeting.</p> <p>The Chairman stated that his view is that due to the elapse of time since publication of early DPAG reports, this report should be produced as a 'stand alone' document.</p> <p>AE invited AT and MS to address this section. AT presented an outline draft of chapter headings covering the beach monitoring section of the report.</p> <p>The data for inclusion in the report was discussed and it was proposed that the data cut-off date is end of September 2012.</p> | <p>It was recommended that an Executive Summary by AE should be included in the report.</p> <p>It was recommended that this report should include historical definitions and methodology used for categorisation of particles.</p> <p>Various amendments and additions to the draft were noted and applied live on-screen during the meeting.</p> | <p>PD agreed to look at this issue for possible inclusion in the final report. PD</p> <p>It was agreed that the report should be 'future-proofed' and would include relevant historical and background information. All</p> | <p>Open</p> <p>Open</p> | <p>ASAP</p> <p>ASAP</p> |

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| <p>11 Preparation of Group's Final Report to SEPA and DSRL</p> <p>11.2 Beach Monitoring <i>(continued)</i></p> | <p>AT & MS were asked to consider any further diagrams or images required from DSRL for this section. DSRL indicated that they would also be prepared to re-configure the information it has already issued, where possible.</p> <p>During the discussion, the Group considered the continued necessity for the FEPA exclusion zone. MS stated that, with a monitoring regime in place, it should be possible to detect any repercussions of allowing trawler movement through the plume.</p> | <p>It was noted that further data may be required for this section.</p> <p>It was recommended that it might be helpful to obtain more information on the level of potential seabed disturbance attributable to beam trawlers moving through the plume.</p> | <p>PC & BT agreed to provide diagram of Nuvia graph for review of detection capability; AT agreed to liaise with PC and BT on configuration of data and any additional diagrams or images required for this chapter. DSRL + AT</p> <p>TA agreed to seek an opinion from his colleague on predicted disturbance of particles buried at depth if beam trawler activity is resumed. TA</p> | <p>Open</p> <p>Open</p> | <p>ASAP</p> <p>ASAP</p> |
| <p>11.3 Offshore Monitoring</p> | <p>The Chairman invited TA to address this chapter. TA tabled an outline draft he had produced and the chapter content was discussed and considered by the Group. During the discussion on repopulation, it was proposed that this should be included in the report.</p> | <p>It was noted that first-pass data is critical to the re-population section.</p> | <p>DSRL agreed to provide relevant data. DSRL</p> <p>It was agreed that DSRL and TA would pursue the approaches discussed to try to extrapolate data from a density plot. DSRL + TA</p> | <p>Open</p> <p>Open</p> | <p>ASAP</p> <p>ASAP</p> |

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| <p>11.3 Offshore Monitoring <i>(continued)</i></p> | <p>During the Group’s deliberations, TA raised the potential of particle ‘tracking’ in the context of migration and referred to a report commissioned by UKAEA in the late 1990’s. TA suggested that it might be helpful to look at this report.</p> | <p>It was suggested that this report might provide some initial data on particle migration and fragmentation.</p> | <p>TA to consider previous work done on particle tracking by Cambridge University and previous work undertaken by DPAG. TA</p> | <p>Open</p> | <p>ASAP</p> |
| | <p>Predictions from the Wallingford model were discussed in light of current data and information generated by offshore retrieval work. TA reminded the Group that the Wallingford model was valid for a maximum period of five years; Wallingford would not stand by the model predictions beyond that period.</p> | <p>The Group noted that the Wallingford model was valid for a period of five years and beyond that period the uncertainties ‘mushroomed out’.</p> | | | |
| | <p>PD suggested that a list of the scoping out and all images required by TA from DSRL should be defined, to enable DSRL to work through what is required before the next meeting. Following discussion, it was proposed that TA should liaise directly with DSRL to identify what can be produced. TA suggested that, in order to expedite production, he would be prepared to travel to Dounreay to meet with DSRL on site to work on the configuration and presentation of data.</p> | <p>It was noted that TA will liaise with DSRL to create re-population maps, or any other images, required for this chapter.</p> | <p>TA agreed to forward requests to PC initially, via email. TA</p> | <p>Open</p> | <p>ASAP</p> |
| | <p>It was noted that TA would take this forward via e-mail and/or a meeting in Dounreay if necessary. It was recommended that TA submit his requests as soon as possible.</p> | <p>It was also agreed that, if necessary, TA will meet with DSRL to explore feasibility of the imaging system, possibly during week commencing 3 December (date subject to Jason’s availability). TA + DSRL</p> | <p>Open</p> | <p>At mutually convenient date</p> | |

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| <p>12 PRAG(D) Work Programme</p> | <p>PD outlined a summary of outstanding requirements on DSRL to enable the Members to progress the production of the final report.</p> <p>The Chairman proposed that the Members should produce draft text within their respective chapter headings, as discussed and agreed during the Group's deliberations. He requested that all draft sections be available for consideration at the next meeting.</p> | <p>It was noted that AT requires several maps for the Beach Monitoring chapter.</p> <p>It was also noted that AE requires maps of beaches and an image indicating all particle finds, as discussed for the Introduction section.</p> <p>It was noted that the Lab analysis on the 'unusual' particle is not yet available for work on this section of the report.</p> <p>It was noted that the Tec Sec requested that all images and data configurations required from DSRL should have been clearly identified before the next meeting.</p> | <p>It was agreed that AT will communicate directly with PC to clarify requirements. AT + PC/BT</p> <p>DSRL agreed to liaise with AE to produce the images and maps requested. DSRL + AE</p> <p>It was agreed that all Members would produce relevant draft chapters for the Group's final report, as discussed and agreed at today's meeting. All Members</p> <p>Members agreed to prioritise clarification of images required from DSRL. All Members + DSRL</p> | <p>Open</p> <p>Open</p> <p>Open</p> <p>Open</p> | <p>ASAP</p> <p>ASAP</p> <p>For Nov mtg</p> <p>Before Dec mtg</p> |
| <p>13 Future Meetings</p> | <p>The Chairman confirmed that the next meeting would be held as previously scheduled: on 18 December.</p> | <p>It was noted that the next meeting would be held in Glasgow on Tuesday 18 December, commencing at the earlier time of 10:00 am</p> | <p>Draft text for final report to be available in advance of the December meeting. All Members</p> | <p>Open</p> | <p>Urgently required</p> |

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| 14 Any Other Business | PD informed the Members that extensions to their contracts to cover the period from the end of the calendar year to the end of the FY would be issued by SEPA. | | It was agreed that the Members' contracts be extended by 3 months, to the end of the FY. PD | Open | At Dec mtg |
| | The Tec Sec requested that all outstanding claims for reimbursement of expenses be submitted promptly to JM. | | Outstanding expense claims to be presented as soon as possible. All Members | Open | ASAP |
| 15 Chairman's Closing Summary | The Chairman thanked those present for their attendance and contributions to the meeting. | | | | |

Acronyms

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| DPAG | Dounreay Particles Advisory Group |
| DSG | Dounreay Stakeholders Group |
| DSRL | Dounreay Site Restoration Limited |
| FY | (SEPA) Financial Year: 1 st April 2010 to 31 st March 2011 |
| HPA | Health Protection Agency |
| NDA | Nuclear Decommissioning Authority |
| PRAG(D) | Particles Retrieval Advisory Group (Dounreay) |
| ROV | Remotely Operated Vehicle |
| SG | (The) Scottish Government |
| SEPA | Scottish Environment Protection Agency |