

Radiation Health & Safety Advisory Council

an advisory body to the CEO of ARPANSA, established under the ARPANS Act 1998
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DRAFT MINUTES OF MEETING OF 9 AUGUST 2002

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1 OPENING OF MEETING AND ATTENDANCE

Council met at Miranda on 9 August 2002. The following were present:

Members: Dr Rick McLean (Chair)
Dr Nick de Klerk
Dr Arthur Johnston
Dr John Loy
Mr Peter Raue
Prof Richard Smart
Dr Garry Smith
Ms Sylvia Kidziak (participated by teleconference for items 6 - 11 & 14.2)
Dr Lorraine Robb
Ms Lorraine Plues
Dr Graeme Dickie

Secretariat: Mr Alan Melbourne
Ms Heather Letwin

Observer: Mr Simon Critchley joined the meeting by teleconference for item 14.1.

Dr McLean opened the meeting at 9:30 am and welcomed all members.

2 APOLOGIES

Mrs Jill Fitch

3 CONFIRMATION OF MINUTES OF THE 12 APRIL 2002 MEETING

The minutes were confirmed without amendment.

4 BUSINESS ARISING FROM THE MINUTES

The CEO informed Council that the paper on the proposed ELF Survey had now been published in the Radiation Protection in Australasia, the journal of the Australasian Radiation Protection Society, and ARPANSA had written to a range of organisations seeking support for the survey.

5 ARPANSA'S CORPORATE PLAN 2002-2005

The CEO briefed Council on ARPANSA's Corporate Plan for the next 3 years, noting that the plan was now close to final. Planning covered areas of :

- (a) health assessment of ionizing radiation;
- (b) measurement and modelling of absorption of radiofrequency radiations;
- (c) promoting the safe use of radiation in medicine through surveys, measurement and advice;
- (d) development of the National Directory for Radiation Protection;
- (e) communication, transparency and participation; and
- (f) regulation, where the emphasis will change from licensing to inspection activities.

The Plan also specified outputs under each of the above headings, and would link to Branch Plans, which would provide more detail on activities being undertaken. Council noted the Corporate Plan, and agreed that Council priorities should also take account of the Plan.

6 COUNCIL RADIOACTIVE WASTE WORKING GROUP

Council was provided with a revised copy of the draft report which had been restructured following earlier comment, comments from members and responses to that comment, and an updated list of relevant Acts, regulations and policy documents. Council reviewed the draft and agreed that the report now has a logical framework and can be completed following further final editing, and in particular focussing on the recommendations. A number of other editorial suggestions were discussed and Council members agreed to provide comment to the Secretariat within one month, so that a further draft could be prepared within two months and circulated for completion at the next Council meeting. An appropriate covering letter will also be required. Dr Smith requested that at its next Council consider whether it would be involved in policy formulation.

7 RISK COMMUNICATION – NRPB LESSONS LEARNED FROM UK INQUIRY INTO BSE & vCJD

Council discussed a number of papers arising from consideration in the UK of matters arising from handling of responses to the BSE and vCJD issue. In particular, it was noted that the National Radiological Protection Board (NRPB) had set up the Radiation, Risk and Society Advisory Group (R,RSAG) to help NRPB improve the ways it heard public views and communicated with the public. Dr Smith felt that testing of the claims of Commonwealth proposals at the Environment Protection and Biodiversity Conservation Act stage, including inquiries for major developments, would facilitate nuclear regulation under the ARPANS Act. Council agreed that it should establish a dialogue with R,RSAG to keep informed of their progress and learn from their experience in this area. Council also agreed that this item should remain a standing agenda item for some time while it was considered further.

8 PRECAUTIONARY PRINCIPLE WORKING GROUP

Council considered the latest drafts of a longer discussion/publication paper and a shorter 'plain English' paper providing advice to the CEO on precautionary approaches in radiation protection. In addition, comments from the Department of Foreign Affairs and Trade, Agriculture, Fisheries and Forestry - Australia, Department of Health and Ageing (Population Health Branch), and Food Safety Australia and New Zealand on the discussion paper were discussed. Council agreed that it should proceed to finalise and publish the longer paper, while making clear that radiation protection was one area where precautionary approaches have been and can unequivocally continue to be applied, which may not be the case for other areas such as food. It was also recognised that the precautionary principle can be mis-used.

Editorial suggestions for the shorter paper included recognising that while there were many opinions on this issue generally, it should be made clear that the paper was Council's (as opposed to ARPANSA's) opinion, and giving more prominence to the section on radiation protection, which was currently toward the end of the paper. Council requested that the Secretariat follow up on responses from the Office of the Gene Technology Regulator and Therapeutic Goods Administration, and also request comment from Environment Australia. A further draft would be prepared, taking account of comment, for finalisation at the next meeting.

9 USE OF RADIATION IN 'PREVENTATIVE MEDICINE' WHOLE BODY CT SCANS & CARDIAC SCORING

Council considered the use of imaging techniques using radiation, such as whole body CT scans and cardiac calcium scoring on asymptomatic patients, and noted the positions of the Royal Australian and New Zealand College of Radiologists (RANZCR) and the Cardiac Society of Australia and New Zealand (CSANZ) on these techniques. Council's view was that these were two clear examples where the ICRP principle of justification of radiation exposure needed to be applied rather than assumed. Council agreed that a letter be prepared for the CEO on the issue, and that Council should also write to the RANZCR and CSANZ supporting their stands and emphasising the need for justification of radiation exposures in future similar situations.

10 UPDATE ON INTERVENTIONAL CARDIOLOGY

The Chair informed Council that following the letters sent jointly with CSANZ to all cardiologists in Australia to raise consciousness about radiation protection issues, there had been a recent discussion with Prof David Muller of CSANZ. There had been little feedback or questions to CSANZ so far. The next stage of the process, developing a questionnaire seeking information on practices and procedures, was now under way. The questionnaire would be trialled on a small number of centres before being refined and circulated widely to the cardiology profession.

11 COUNCIL – FUTURE DIRECTIONS AND AGENDA

As the current Council term of appointment expires in August 2002, and the Minister would make new appointments, Council discussed issues that would be relevant for consideration during the next triennium. The main points raised were:

- (a) how Council works with ARPANSA in setting risk frameworks;
- (b) radioactive waste issues;
- (c) advice related to regulatory decisions on a National Repository;
- (d) radiation and the environment;
- (e) uses of radiation in medicine;
- (f) implementing the commitment to keep abreast of developing science in non-ionizing radiation;
- (g) whether there was a need to review the approach to ultraviolet radiation protection; and
- (h) advising on the adequacy of the Act and the functioning of the Act and regulations.

Issues of how Council operates were also discussed, with the main view being that Council should commission papers from ARPANSA, the Committees or consultants for Council consideration and review, rather than develop the papers within the Council membership. Council also noted that it could possibly provide more direction to, and make better use of, the Committees. The community perception of ARPANSA's independence, transparency, accountability and resourcing were also discussed as possible areas of consideration. Council also noted that possible involvement of non-government organisations in Council operations was a matter for consideration by the Minister.

12 REPORT ON DARWIN CONFERENCE ON PROTECTION OF THE ENVIRONMENT FROM IONIZING RADIATION

Dr Johnston reported that the conference held in Darwin from 22-25 July 2002 had been well organised and highly successful. There were three keynote speakers, a range of

presentations, and workshops. The conference discussion included the need for a practical system to demonstrate that protection of the environment was being achieved, and work towards developing a number of reference organisms. Three areas identified for further work were:

- (a) a framework for evaluation;
- (b) modelling; and
- (c) obtaining data.

In relation to these, development of a framework was reasonably advanced, and there are various models that can be used or developed further, but data was lacking at present. It was hoped that work in these areas could be coordinated and funded by IAEA. A further conference is to be held next year in Stockholm. Arising from discussion on the conference, Council agreed to make the following recommendations to the CEO:

- (1) ARPANSA should take the lead in developing an Environmental Radiation Protection Program for Australia, and should seek to involve an international expert in formulating this program.
- (2) A first step should be a meeting between relevant senior staff of ARPANSA, the Supervising Scientist Division and ANSTO, to follow up on the Darwin Symposium and develop a strategic plan for the development of the program.

13 REPORT FROM THE CEO

The CEO reported on the following issues:

- (a) ARPANSA had inherited papers and ashed bone samples from the monitoring program decades ago to assess strontium-90 levels arising from fallout. Australian Health Ethics Committee had now reported to Ministers, recommending that the process for informing relatives should be through institutions. ARPANSA has supplied information to institutions and the States and returned samples to those institutions. There will be publicity inviting next of kin to contact institutions seeking information, should they wish to know if their relative had been involved in the program.
- (b) The licence conditions for the replacement reactor required approval of the CEO before the construction of any item important for safety. This will ensure that the detailed design is consistent with information provided in earlier submissions. The process is generating a substantial workload.
- (c) The Environmental Impact Statement for the National Radioactive Waste Repository had been issued for public comment by the Department of Education, Science and Training. The Minister for the Environment is the decision-maker under the Environment Protection and Biodiversity Conservation Act. A licence application for the repository is expected later in the year. It was intended that the proponent will be required to undertake an assessment of the radiation effects on the environment as part of that application.
- (d) ARPANSA would be working with States and Territories to develop a strategy for dealing with the risk of terrorists using radiation dispersion devices. This would include consideration of personnel and physical security issues.
- (e) ARPANSA now operated four Comprehensive Test Ban Treaty radionuclide monitoring stations in Melbourne, Townsville, Perth and Darwin, which have been certified by the CTBT organisation in Vienna. ARPANSA is also in the process of setting up a radionuclide laboratory to obtain certification to examine samples from other laboratories in the event of a relevant result being reported. It will also help in understanding further the range of normal measurements to be expected.

- (f) Lars-Erik Holm, Head of the Swedish Radiation Protection Institute and Chair of the ICRP Committee on the Environment, had visited ARPANSA's laboratories to conduct a short review of the scientific work being undertaken. His report had been positive, but had provided some comment that required response. Council members would be provided with copies when the response is complete.

14 COMMITTEE REPORTS

14.1 Report from the Radiation Health Committee

Mr Simon Critchley, Chair of RHC, reported that RHC had met on 31 July and 1 August 2002. A copy of the agenda for the meeting was tabled. RHC had now agreed that the *Recommendations for the Discharge of Patients Undergoing Treatment with Radioactive Substances* should be recommended to Council as suitable for publication. A letter would be sent to Standards Australia regarding their intention to publish a standard on Lasers in Entertainment where an existing RHC code was already in use. Both the *Code of Practice for Radiation Protection in Dentistry* and the *Code of Practice for the Safe Use of Radiation in Veterinary Science* were close to the public comment stage and regulatory impact statements were in preparation. The *Recommendations for Intervention in Emergency Situations involving Radiation Exposure* was also near release for public comment. In relation to the Australian Radiation Incidents Register, RHC members had undertaken to provide comment to the Secretariat on the types of incidents to be reported. RHC also intended to write to AHMAC members and RANZCR, ANZAPNM and ANZSNM regarding incidents in nuclear medicine that resulted from using two different units for activity in some nuclear medicine departments. Council requested that it be provided with a copy of the RHC's priority list for review of codes at the next Council meeting.

14.2 Report from the Nuclear Safety Committee

Ms Kidziak reported that NSC had met on 12 July 2002. A copy of the draft summary of the meeting was tabled. NSC had also discussed future agenda issues and the type of expertise needed for the next triennium. A briefing on seismic issues had been provided, and in addition, spent fuel processing in Argentina, solidification of waste, emergency planning, and reclassification of aircraft accidents from commercial-in-confidence to security-in-confidence were also discussed.

14.3 RHC and NSC Membership

The CEO informed Council of his intention to extend the membership of RHC and NSC members until the end of 2002, to allow them to continue their business and avoid any hiatus that might otherwise occur should there be any delay in the appointment of the Council.

15 OTHER BUSINESS

15.1 Update on Adoption of Transport Code in Australia

Council was informed of progress in adoption of the Transport Code by jurisdictions. ACT, WA, NSW and ARPANSA had now adopted the Code. Other jurisdictions were all in the process of adoption. Council requested a further report at its next meeting.

15.2 Briefing on Reactor Fault Issues

The CEO briefed Council on seismic issues regarding the replacement reactor. As a result of a requirement to confirm that there was no active faulting, additional investigations including examination of the site had been undertaken. During investigation of the excavation the faults had been noticed. ANSTO studies will be carried out to determine the age and size of the fault and whether it was capable of causing movement. ARPANSA was preparing to assess the report, having engaged Geoscience Australia and an international expert through IAEA, to provide advice and direction. The construction licence remained valid, however ANSTO required approval of the CEO before pouring foundations, or for an alternative site. The reports are expected to be available, along with a proposal from ANSTO, within the next few weeks. Dr Smith requested that, if possible, earlier reports on seismic issues be placed on ARPANSA's web site along with the latest report.

15.3 Final Approval of Patient Discharge Recommendations

Council was advised that the Radiation Health Committee had now recommended that the *Recommendations for the Discharge of Patients Undergoing Treatment with Radioactive Substances* be published. The draft had been prepared by a working group of RHC, and had undergone a public comment phase wherein it was available from the ARPANSA web site and about 95 organisations and individuals had been requested to make comment. The working group had reviewed the comment and made changes to the draft to clarify that dose rate was the primary consideration for release of inpatients, however the activity restriction made it easier to assess whether a patient could be treated as an outpatient rather than admitted.

RHC had also commented on the use of "equivalent dose" in the Recommendations, and had now agreed to replace it with the quantity "ambient dose equivalent". Flexibility to consider individual circumstances had been improved and new radionuclides, not in use at the time of the earlier recommendations, had been included. There had been a further opportunity for a few key contributors of comment to assess whether their comment had been adequately addressed before the Recommendations were presented to RHC. Council agreed to advise the CEO to adopt the Recommendations.

15.4 Feedback on RF Standard

Council asked whether ARPANSA had received feedback on the RF Standard and the accompanying Explanatory Guide. A report on feedback will be prepared for the next agenda.

16 CLOSURE AND NEXT MEETING

The next meeting was scheduled for 6 December 2002 at Yallambie. The Chair thanked all members for their contributions during the triennium. The meeting was closed at 3:45pm. A post meeting briefing was offered but no one attended.