

RADIATION HEALTH & SAFETY ADVISORY COUNCIL

Summary of the meeting held on 24 July 2000

1. OPENING OF MEETING, ATTENDANCE AND APOLOGIES

The Chair welcomed Dr Lorraine Plues, Director, Radiation Control Section, Environment Protection Authority, NSW, who had recently been appointed to the Council, and Dr Arthur Johnston, Supervising Scientist, NT, who attended the meeting as an observer, pending his appointment to Council. All members were present and there were no apologies.

3. CONFIRMATION OF THE MINUTES OF THE MEETING OF 14 APRIL 2000

The minutes were adopted without amendment.

4. BUSINESS ARISING FROM THE MINUTES

4.1 Statistics on Accesses to Council web page

There had been 33 accesses to the Council web page in April 2000.

4.2 Development of Memorandum of Understandings with Standards Australia and National Occupational Health & Safety Commission (NOHSC)

The CEO reported that there had been a further meeting with Standards Australia and that a memorandum of understanding was now being drafted. There had been an exchange of correspondence with NOHSC, but no discussion as yet.

4.3 Senate Inquiry on Electromagnetic Radiation

The CEO tabled two submissions to the Senate Inquiry (without the attachments) for Council information. The submissions were from ARPANSA and from the Committee on Electromagnetic Energy Public Health Issues (CEMEPHI). There had been a large number of submissions to the Inquiry and hearings would be held before the Inquiry report is due in October.

The work undertaken by ARPANSA in surveying radiofrequency levels from base stations was also noted. The survey showed that levels are low. Council also noted that it was important that information on work carried out by ARPANSA reaches the public and community groups. Council also discussed the funding of Australian electromagnetic energy (EME) research. The National Health & Medical Research Council (NHMRC) has called for a second round of research submissions and expects to finalise funding early next year. The Stewart Report on mobile phones in the UK was also discussed. It was noted that it relied upon a thorough review of the science, rather than new research.

4.4 Other issues arising from the minutes

Council noted that there was now published information that radiofrequency levels to the head from mobile phones are much lower when using hands-free devices. The Secretariat will obtain copies and circulate.

SA legislation on radioactive waste had passed the Lower House, but had not yet proceeded through the Upper House. It is expected that it will be considered by the Parliament in October. The Bill would only affect the proposal for an intermediate level waste storage facility, not the low level repository.

There is an ongoing trickle of enquiries about doses received by personnel who had been at Maralinga, Emu or Monte Bello Islands, following agreement that ARPANSA and the Council should act as the "clearing house" for enquiries arising from the Kaldor Report recommendations.

5. REPORT FROM THE CEO

The CEO tabled a report on recent ARPANSA activities. These included ARPANSA's review of ANSTO facility licence applications, and the need to make information public and deal with public comment. A timetable for public submissions had been established. It was noted that ANSTO had entered into a contract with INVAP for the replacement reactor. ARPANSA was properly not a part of this decision. ANSTO was expected to apply for a licence to construct the reactor during 2001. The CEO also tabled a letter responding to concerns about the impact of uncertainty about the storage of Category S waste on ARPANSA decisions on licensing of the replacement reactor. The CEO advised of his role on a working party to the Repatriation Medical Authority in developing a statement of principles for assessing claims under the Veterans Affairs Act arising from conditions claimed to be caused by exposure to ionizing radiation. In regard to Maralinga it was noted that matters about issue of a licence for continued management of the range would be completed shortly. The CEO also reported on a recent overseas trip to UK and Europe, where he had discussions with NRPB on planning and mobile phone issues, and with the UK Nuclear Safety Directorate on nuclear safety issues including seismicity. He had also visited Geneva for a meeting regarding the WHO International EMF Project.

6. PRESENTATION

Dr Rob Lee, Director Human Factors, Systems Safety and Communications, Australian Transport Safety Board (ATSB), made a presentation to Council on the ATSB approach to investigation of accidents and safety systems. Dr Lee described active and latent failures that lead to accidents, and emphasised the importance of management involvement in safety culture. The ATSB approach is based on the model developed by Professor James Reason of the University of Manchester. The program was trialed by an Australian regional airline and the results of the trial showed a demonstrated improvement in safety culture, that staff were more willing to report safety hazards, and were much more positive about airline safety management. The program has been shown to reduce costs from accidents and incidents and to develop safety culture. Additional information is available at the web site address <http://www.basi.gov.au>.

7. GENERAL BUSINESS

7.1 Planning for Council's Future Work Program

The Chair reported on a meeting to discuss the roles and relationships of the Council, Committees and ARPANSA and plan for future priorities. It had been noted that while Radiation Health Committee had a well established program from the pre-existing Committee, Council and Nuclear Safety Committee were new bodies where roles and priorities were still developing. A number of major issues were identified for Council and Committees, including radioactive waste, the Radiofrequency Standard, interventional radiology, public consultation, ARPANSA resources and staff and their roles, scheduling of meetings, use of consultants in particular cases, the non-human environment, and the replacement reactor. A need to have some dialogue outside the meeting with relevant organisations on the role of Radiation Health Committee and Council in interventional radiology was noted. In relation to protection of the non-human environment, a paper will be prepared for next meeting.

7.2 Request to Council for Advice on Radioactive Waste Management

The CEO tabled a formal request to Council to provide advice on radioactive waste management issues, taking into account the proposal for a low level national radioactive waste repository and an intermediate level radioactive waste store. Council agreed to form a working group to develop advice to respond to the CEO's request. The working group, comprising Rick McLean, Garry Smith, Lorraine Plues, Arthur Johnston and Peter Raue, will report on progress to the next Council meeting.

7.3 Incidents in Nuclear Medicine

Dr Smart addressed the Council on maladministrations in nuclear medicine. Dr Smart had reviewed 14 cases that had been reported to the NSW Radiological Advisory Council over a 3 year period. Guidelines had been developed by the Australian & New Zealand Society of Nuclear Medicine, and the Hospital and University Radiation Safety Officers Group (HURSOG), at the request of the NSW Radiation Advisory Council. These guidelines are available at <http://www.anzsnm.org.au/physics/papers.htm>. The guidelines introduced policies to prevent maladministrations.

7.4 Precautionary Principle – application in Radiation Protection

The CEO tabled a paper outlining background to the precautionary principle, and recommending that Council establish a working group to consider the issues further, with a view to preparing a Council publication on precautionary principle or precautionary approaches in radiation protection. In the case of ionizing radiation, the ALARA principle includes some elements of the precautionary approach, and is in fact built into the standards. In the case of radiofrequency, limits are set to avoid thermal effects, however non-thermal effects are not established, and some authorities recommend a precautionary approach as a result. It was agreed to establish a working group, comprising Graeme Dickie (convenor), Arthur Johnston, Nick de Klerk, Richard Smart, Lorraine Robb and Lorraine Plues, which will report to the next meeting.

7.5 Principles for Public Consultation

The CEO tabled a protocol for public consultation, and noted that the Radiation Health Committee had a formal requirement under the Act to consult, which was not the case for the Council and Nuclear Safety Committee. The paper sought the Council's approval of the protocol and Council's decision on the application of the protocol to activities of the Nuclear Safety Committee and the Council itself. Council members commented on a number of aspects of the level of consultation and mechanisms required. The CEO will develop the protocol further taking into account the Council's comments.

8. COMMITTEE & CONFERENCE REPORTS

8.1 Report from Radiation Health Committee (RHC)

The RHC had met on 19 and 20 July 2000. The agenda for the meeting was tabled and the following items noted. Issues included radioactive waste, medical radiation issues, the scope of regulation, laser pointers, cosmic radiation exposure to air crews, the publication program, the mining codes, the Transport Code. In relation to uniformity, RHC had agreed to consider the Indicative Directory in detail next meeting via the process agreed by Ministers. The comments of Nuclear Safety Committee on dose limits in Radiation Health Series (RHS) publication 39 will also be discussed in detail next meeting. RHC had decided that a National Radiation Dose Register was needed and agreed on its role.

8.2 Report from Nuclear Safety Committee (NSC)

The Nuclear Safety Committee met on 14 July 2000 and had identified important matters to look at, including public consultation. Emeritus Professor Polmear of NSC had addressed the Committee on the probabilistic safety assessment and remaining life studies undertaken regarding the HIFAR reactor (and the subsequent seismic study). Several matters relating to the licensing of ANSTO had been discussed. The working group reviewing the Safety Assessment Principles had presented its comments to ARPANSA. NSC had also discussed the issue of differences in aspects of the radiation protection dose limits between RHS 39 and those in the ARPANS Regulations. The matter had been referred to Radiation Health Committee. NSC also discussed the timeframes, priority setting and direction from Council issues that had arisen from the planning day.

8.3 Report on International Radiation Protection Association (IRPA) Congress, Hiroshima

The Chair reported on the IRPA Congress held in Hiroshima. Some of the key topics were radiation effects on the environment, doses from interventional radiology, public consultation on radiation issues such as waste repositories, follow up on A-bomb survivors, Chernobyl, and Tokaimura accidents. There had also been a meeting of the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and their review program for the next 5 years included documents on static fields, extremely low frequency (ELF), optical, ultraviolet and ultrasound. There had also been papers on uranium miner epidemiology, where the results so far were within the range of earlier meta-analysis studies.

9. OTHER BUSINESS

9.1 Report on Development of RF Standard

Dr Dickie reported that the working group hoped to have a draft for the next RHC meeting, that the process being undertaken was good, and that he was confident that it would be successful. The process included provision for public consultation. The standard itself will be relatively short, and there will be a number of annexes containing the rationale and background information. The next meeting of the working group is scheduled in about one month's time.

10. CLOSURE AND NEXT MEETING

The next meeting is scheduled for Friday, 1 December 2000.