97-07-04

Advisory Commission on Safety Standards
Third Meeting
2-3 June 1997
IAEA Headquarters, Vienna

Report of the Meeting

1. Introduction

Participants were welcomed to the third Meeting of Advisory Commission on Safety Standards (ACSS) by Mr. Z. Domaratzki, Deputy Director General, Head of the Department of Nuclear Safety. In opening the meeting Mr. Domaratzki pointed out that the first phase of the Commission's work, namely, identification of priority safety standards, assignment of the lead Advisory Committee for their development and approval of a unified procedure for the preparation of safety standards, has been completed. The second phase of the work, namely, review and endorsement of the safety standards, will start by the time of the next ACSS meeting.

Dr. Bishop also welcomed the participants, in particular those attending for the first time. The agenda for the third meeting of ACSS was approved (Annex I).

Clarification was requested regarding the topics of safety culture, criteria for reporting of significant events, backfitting, glossary of terms and plan for development of Safety Standards, which according to the report of second meeting of ACSS, should have been included as an agenda item for this meeting. In response, the Secretariat provided the following information:

Criteria for reporting of significant events: The topic was discussed in the last NUSSAC meeting. However, because of divergent views on the need for such a document, no decision was taken on this issue. NUSSAC will consider this topic again in its next meeting. A paper highlighting the background and justification for the development of this topic was distributed during the meeting.

Safety culture: A consultant's meeting is planned for September 1997 to review the report and provide recommendations on evaluation of a safety culture, with an insight on how and why a well developed safety culture can deteriorate in a span of a few years. The revised report will be sent to members of ACSS for review and comments towards the end of this year.

Backfitting: In view of a recent decision by NUSSAC to proceed with the development of a Safety Guide on modifications in operating nuclear power plants, it was felt that it is appropriate to postpone the consideration of the topic by ACSS. A draft Document Preparation Profile (DPP) for the Safety Guide has been prepared. Following its approval by NUSSAC, it will be sent to ACSS members for consideration.

Glossary: A draft Glossary has been prepared. After completion of a preliminary review, it will be submitted to the ACSS and the Advisory Committees for consideration.

Plan for Development of Safety Standards: A list of Safety Standards in preparation and their status is provided in attached Annex II.

2. Overview of the PPAS: Peer Review of the IAEA Safety Programme

Mr. Domaratzki presented an overview of the results of the Peer Review of the IAEA Safety Programme, conducted in January 1997. The report, containing 74 recommendations, will be used as an input in the preparation of the IAEA 1999-2000 Safety Programme. The Secretariat will prepare its response to each of the recommendations in the process of preparing the 1999-2000 Programme. The ACSS members were informed

that the process for the preparation of the 1999-2000 programme is underway. Mr. Domaratzki reiterated that comments from ACSS would be welcomed. The ACSS members confirmed their view that the Agency should record and review their follow-up to the recommendations.

3. Policy Issues

Mr. A. Gonzalez, Director of the Division of Radiation and Waste Safety, provided a summary of the Division's activities and raised a number of policy issues related to safety standards, for which the advise of ACSS was sought. After a brief discussion, Mr. Gonzalez was requested to submit the proposals to the Chair of ACSS. A list of policy issues proposed by Mr. Gonzalez, the Advisory committees and the members of ACSS during the meeting is attached as Annex III.

A draft paper, prepared by Mr. Gonzalez, on the IAEA Safety Standards for Radiation, Waste and Nuclear Safety, was distributed during the meeting. Comments and views of the members were requested to be sent to the Chair by the end of July. The chair will consolidate and forward an ACSS response to the Agency. Dr. Bishop stated that a subgroup will be appointed to review the policy issues, including those in Annex III, raised and prepare a working document for consideration at the next ACSS meeting.

4. Reports of the Advisory Committees

The reports of the four Advisory Committees (NUSSAC, RASSAC, TRANSSAC and WASSAC) were presented by Messrs. Campbell, Mason, Blalock and Raynal, respectively. Clarification was requested regarding the scope and objectives of a number of standards being prepared. The reports of the Advisory Committees indicated that a number of draft standards have now been approved for transmission to the Member States for comments and will be ready for consideration by ACSS in early 1998.

An annual report, which had been prepared by RASSAC in accordance with the terms of reference, was distributed. The possibility of drafting an annual or biannual report by the ACSS will be discussed at the next meeting.

It was generally agreed that Safety Requirements should be published as interim documents until the related Safety Guides are in an advanced stage of development.

5. Upgrading Radiation Safety and Waste Safety Infrastructure (Model Project)

Mr. Mrabit made a presentation on the objectives and status of the above Model Project. The importance of the project, in which 53 Member States are being assisted, was underlined by the ACSS. However, it was pointed out that a proper balance between knowledge (education and training) and the ability to apply this knowledge (rules and regulations) is essential for the success of upgrading radiation and waste safety infrastructure. The assessment of infrastructure in radiation safety and waste safety is being done on the basis of the IAEA Safety Requirements, as appropriate.

A similar approach, for assessment of nuclear safety infrastructure, is being taken for projects relating to nuclear safety, however, the use of 'benchmarks' or 'safe reference basis' in developing a strategy for assisting the Member States in the field of nuclear safety was questioned. The Secretariat's objective is to develop a strategy for providing assistance to Member States through Technical Co-operation projects only. Following an initial approach from a Member State for nuclear safety assistance, a review of actual situation in the Member States will be carried out against a pre-defined reference basis. This will result in a systematic approach for the evaluation of requests for assistance and for developing a harmonized action plan with the related milestones.

6. Co-ordination with INSAG

The minutes of the thirty-fourth INSAG meeting were distributed to members of ACSS in advance of the meeting. It was generally agreed that the exchange of minutes of meetings is the appropriate means of co-ordination with INSAG. The top-level document and update of INSAG-3, currently in preparation by INSAG, are essential to the mandate of the ACSS. Dr. Bishop will communicate this to the Chairman of INSAG and request the opportunity for the ACSS to comment on the two drafts.

7. Meeting of Chairpersons of ACSS, NUSSAC, RASSAC, TRANSSAC, and WASSAC

The Commission was informed that a meeting between the Chairmen of the Advisory Committees and the Chair of ACSS was held in February 1997. The meeting resulted in the approval of a set of unified procedures for the development of Safety Standards. The question of topics of interest to more than one Advisory Committee was also addressed, confirming the decisions made at the first meeting of the ACSS. The commission was also informed that the chairpersons of the committees will meet once a year to discuss issues of common interest. Such meetings will be arranged in conjunction with regular ACSS meetings, so that the chairpersons have the opportunity to communicate directly with the Commission.

8. Review of Document Preparation Profiles by the ACSS

The need was discussed for an early input, by the ACSS, to the preparation of safety standards. It was decided that after the approval of Document Preparation Profile (DPP) by the lead Advisory Committees the DPP should be sent to the Chair of ACSS for approval by the ACSS. The DPPs should be very clear on the objective and the intended users of the standard.

9. Topics for Peer Discussion Groups and Senior Regulators Meeting

A list of topics was proposed by the ACSS Members for consideration for the peer discussion groups or the Senior Regulators' Meeting. Each topic proposed was discussed and a short list was drawn up. A decision was taken on their suitability for peer discussion groups or the Senior Regulators' Meeting. A complete list of the topics proposed is attached as Annex IV for future reference. The following is the list of topics selected:

Peer discussion groups

- Assessment of regulatory effectiveness, including resource allocation;
- Deregulation and its effect on safety.

Senior Regulators' Meeting

- Assessment of safety culture by regulatory authorities;
- Good regulatory practices including public information policy, in reporting of incidents;
- Maintaining, developing and retaining professional expertise in regulatory agencies;
- Licencing and design basis maintenance.

A suggestion was also put forward to give the general title of *Safety Culture* to the 1997 Senior Regulators' Meeting and discuss the above topics in the context of an overall safety culture.

The consideration of the these two activities, with a view to enhancing their usefulness, was briefly discussed. It was generally agreed to include the topic as an agenda item for the next ACSS meeting.

10. Participation of ICRP Representative in ACSS meetings

Dr. Bishop informed the members of ACSS that Mr. J. Valentin had recently been appointed Secretary of ICRP, and after consultation with the President of the ICRP has written (copy of email from Valentin to Bishop attached as Annex V) to Dr. Bishop and the Scientific Secretary requesting his participation as an ICRP representative, in an observer capacity, in the meetings of ACSS. The Members of ACSS, with two exceptions, agreed to the request from the ICRP. It was decided to invite Mr. Valentin as an observer to the meetings of the ACSS.

11. Dates and agenda for the next meeting

The ACSS members were informed that a number of safety guides are being prepared for submission to Member States for comments and they will not be ready in time for consideration in the November meeting of ACSS. It was therefore decided to cancel the November 1997 meeting. The next meeting of ACSS will be held during the first week of June 1998. The dates of the ACSS and the Advisory Committee meetings will be communicated to all Members in the near future.

ANNEX I

AGENDA
Third Meeting of the
ADVISORY COMMISSION ON SAFETY STANDARDS
2 - 4 June 1997
Meeting Room CO7-IV, IAEA Headquarters, Vienna

1. Opening of the Meeting (9.30 a.m.)
   Z. Domaratzki DDG-NS

2. Introduction, Adoption of the Agenda
   Dr. Bishop

3. Overview of the PPAS: Peer Review of the IAEA Safety Programme
   Z. Domaratzki DDG-NS

4. Activities in the Division of Radiation and Waste safety
   A. Gonzalez (Director, Division of Radiation and Waste Safety)

5. Status of Development of Safety Standards: Presentation and discussion of reports of Safety Standards Advisory Committees

   5.1. Nuclear Safety Standards Advisory Committee
   R. Campbell, Co-ordinator, NUSSAC

   5.2. Radiation Safety Standards Advisory Committee
   C. Mason, Co-ordinator, RASSAC

   5.3. Transport Safety Standards Advisory Committee
   L. Blalock, A/Co-ordinator, TRANSSAC

   5.4. Waste Safety Standards Advisory Committee
   M. Raynal, Co-ordinator, WASSAC

6. Co-ordination with INSAG

7. Meeting of Chairpersons of ACSS, NUSSAC, RASSAC, TRANSSAC, and WASSAC

8. Upgrading Radiation and Waste Safety Infrastructure (Model Project)
   K. Mrabit (Safety Co-Ordination Section)

9. Presentation and Discussion of Regulatory Issues (*ACSS Members*)

10. Topics for Peer Discussion Groups

11. Topics for Senior Regulators Meeting (GC, September 1997)

12. Any other business

13. Report of the Meeting and Recommendations

14. Date of next meeting and closing

ANNEX II

STATUS OF SAFETY STANDARDS IN PREPARATION

NUSSAC 1997-06-18

ID	Proposed Title	Committees	Status
NS 179	Requirements for the Safety of NPPs; Operation	All	With MS for comment.
NS 180	Requirements: National responsibilities for controlling nuclear and radiation safety	All	Under preparation. To be sent to ACSS and 4 Acs in Sept. 97.
NS 181	Requirements on the Safety of NPPs: Design	NUSSAC	1st draft to go to NUSSAC, July 97.
NS 182	Safety Guide: Dispersion: Combination of SG-S3, S4, S6, S7	NUSSAC	1st draft being prepared.
NS 183	Safety Guide: Extreme meteorological events in NPP siting	NUSSAC	1st draft being prepared.
NS 184	Safety Guide: Operations - policies, procedures	NUSSAC	1st draft with NUSSAC for review.
NS 187	Safety Guide: Operational management of radiation protection & radioactive waste in NPPs	RASSAC, WASSAC, NUSSAC	Preparing first draft for submission to ACs
NS 247	Safety Guide: Organization and staffing of the regulatory body for nuclear facilities and activities	All	DPP being reviewed.
NS 248	Safety Guide: Conduct of regulatory review and assessment of nuclear facilities and activities	All	DPP being reviewed.
NS 250	Safety Guide: Operating organization	NUSSAC	1st draft complete to be sent to NUSSAC.
NS 251	Safety Guide: Modifications	NUSSAC	DPP under NUSSAC review.
NS 252	Safety Guide: Instrumentation and control for systems important to safety in NPPs	NUSSAC	DPP under NUSSAC review.
NS 253	Safety Guide: Design verification and safety assessment	NUSSAC	DPP under review.
NS 258	Safety Guide: External man induced events in relation to NPP siting	NUSSAC	DPP approved. 1st draft under preparation.

RASSAC

ID	Proposed Title	Committees	Status
NS 4	Safety Guide: Radiation Protection Glossary	RASSAC	Working material approved for interim use of drafting groups (RASSAC3); comprehensive glossary being prepared by SC section as GS (General Safety) document
NS 12	Safety Guide: Assessment of external radiation exposure for occupational protection	RASSAC	Draft to go to Member States (September 1997) after final editing (RASSAC3).
NS 17	Safety Guide: Radiation protection of workers in the mining and milling of radioactive ores	RASSAC	Draft reviewed by RASSAC3; status as Safety Guide unresolved. Secretariat to propose next step.
NS 19	Safety Guide: Operational radiation protection: A Guide to optimization	RASSAC	Published in 1990 as SS101. Still valid, but to be reviewed in 1998 for consistency with the BSS and to include more practical guidance.
NS 21	Safety Guide: Occupational radiation protection in the decommissioning of nuclear facilities	RASSAC WASSAC NUSSAC	On hold. The need for this guide has been questioned (RASSAC1) and its status will be reviewed in the light of the final draft of NS69: Occupational Radiation Protection.
NS 22	Safety Guide: Radiation protection in the medical exposure of patients	RASSAC	Outline prepared in collaboration with PAHO, but not yet seen by RASSAC. Needs DPP.
NS 25	Safety Guide: Regulatory control of radioactive discharges into the environment	RASSAC WASSAC	**WS** (Waste Safety) document for which RASSAC has the lead. Final draft to be sent to RASSAC members (September 1997) for clearance to go to Member States (RASSAC3).
NS 31	Safety Guide: Consumer products containing radioactive substances	RASSAC	Draft almost finalized apart from review of consumer-product-specific exemption levels. Explanation paper to be circulated to RASSAC members (June 1997) before approval to go to Member States (RASSAC3).
NS 32	Safety Guide: Extension of the principles of radiation protection to sources of potential exposure	RASSAC	Published in 1990 as a Safety Report, SS104. Valid, but to be updated in due course.
NS 33	Safety Guide: Principles for the exemption of radiation sources and practices from regulatory control	RASSAC	Published in 1988 as SS89. Still valid, but to be updated (starting late 1997) for consistency with the BSS and to include exclusion and clearance (RASSAC3). Will need DPP.
NS 43	Safety Guide: Methods for the development of emergency response preparedness for nuclear or radiological accidents	RASSAC NUSSAC	Published in 1988 as SS89. Still valid, but to be updated (starting late 1997) for consistency with the BSS and to include exclusion and clearance (RASSAC3). Will need DPP.

NS 44	Safety Guide: Intervention criteria in a nuclear or radiation emergency	RASSAC	Published in 1994 as SS109. Still valid. Status to be reviewed in the light of experience with NS43 (TECDOC-940).
NS 51	Safety Guide: Application of the principles of radiation protection to chronic exposure situations	RASSAC WASSAC	Not started. Will need DPP.
NS 61	Safety Guide: Prevention, detection of and response to illicit trafficking in radioactive materials	RASSAC TRANSSAC	An outline has been prepared. DPP expected July 1997.
NS 62	Safety Guide: Source and environmental monitoring for radiation protection of the public	RASSAC WASSAC	An outline has been prepared. DPP expected June 1997.
NS 67	Safety Guide: Organization and operation of a national regulatory infrastructure governing protection against ionizing radiation and the safety of radiation sources	RASSAC	To be published (June/July 1997) as a TECDOC for interim use. Feedback from its application will be used in developing a guide (if necessary) to the draft **GS** (General Safety) Safety Requirements document on National Responsibilities for Controlling Nuclear and Radiation Safety for which NUSSAC has the lead.
NS 69	Safety Guide: Occupational radiation protection	RASSAC	Draft to go to Member States (September 1997) after final editing (RASSAC3).
NS 73	Safety Guide: Qualification and training requirements qualification for radiation protection	RASSAC	Not started. Will need DPP.
NS 85	Safety Guides: Assessment of internal radiation exposure for occupational protection	RASSAC	Draft to go to Member States (September 1997) after final editing (RASSAC3).
NS 99	Safety Guide: Medical handling of accidentally exposed individuals	RASSAC	Outline being prepared, but not yet seen by RASSAC. Needs DPP.
NS 113	Safety Guide: Quality assurance in radiation protection	RASSAC	Not started. On hold pending overview of QA.
NS 114	Safety Guide: Safety and security of radiation sources	RASSAC	Draft reviewed by RASSAC3. Revised draft to be sent (3rd quarter 1997) to RASSAC members for clearance by correspondence to go to Member States.
NS 115	Safety Guide: Regulatory control of radioactive discharges into the environment	RASSAC WASSAC	Reviewed by RASSAC3 and WASSAC3. Revised draft to be sent to committee members for clearance by correspondence to go to Member States.
NS 187	Safety Guide: Radiation protection and the safe management of radioactive waste during operation of nuclear power plants	RASSAC NUSSAC WASSAC	**NS** (Nuclear Safety) document for which RASSAC has the lead. Existence of draft noted by RASSAC3 but the need for the document to be a Safety Guide was questioned. Technical Committee Meeting scheduled for June 1997. Secretariat to propose next step.

WASSAC

ID	Proposed Title	Committees	Status
NS 153	Safety Requirements: Near surface disposal of radioactive waste (111-S-3)	WASSAC	Approved with comments at May 97 mtg. Will circulate to MS after in-house revision.
NS 154	Safety Requirements: Geological disposal of radioactive waste (11-S-4)	WASSAC	DPP to be prepared in 1998, along with review document to be issued by subgroup on P & C
NS 159	Safety Guide: Predisposal management of low and intermediate level waste from nuclear fuel facilities (111-G.2./G2.3)	WASSAC	Draft available - further consultation with WASSAC required before transmission to MS.
NS 160	Safety Guide: Predisposal management of radioactive management from medicine, industry and research (111-G.2.2)	WASSAC	Draft available - further consultation with WASSAC required before transmission to MS.
NS 163	Safety Guide: Predisposal management of high level waste (111-G-2.4, 111-G-2.5)	WASSAC	DPP approved at May 97 mtg. Development of document with CSM & TCM in 97
NS 165	Safety Guide: Design, construction, operation and closure of near surface repositories (111-G-3.2)	WASSAC	Draft available - further consultation with WASSAC required before transmission to MS.
NS 166	Safety Guide: Safety assessment for near surface disposal (111-G-3.3)	WASSAC	Approved with comments by WASSAC May 97 mtg. Will circulate to MS after in house revision.
NS 168	Safety Guide: Design, construction, operation and closure of geological repositories (111-G-4.2)	WASSAC	DPP to be prepared in 1998 along with review document to be issued by subgroup on P & C.
NS 169	Safety Guide: Safety assessment for geological disposal (111-G-4.3)	WASSAC	DPP to be prepared in 1998 along with review document to be issued by subgroup on P & C.
NS 170	Safety Guide: Siting, design, construction, operation and closeout of facilities for the management of wasste from mining and milling of U/Th (111-G-5.1)	WASSAC	Draft available. Further consultation needed in Autumn 98.
NS 172	Safety Guide: Decommissioning of nuclear fuel cycle facilities (111-G6.3)	WASSAC, NUSSAC	Revision of document with CSM June 97. Consideration for approval at Dec. 97 mtg. For circulation to MS.
NS 173	Safety Guide: Decommissioning of medical, industrial and research facilities (111-G-6.2)	WASSAC	Revision of document with CS June 97. Consideration for approval at Dec. 97 mtg. For circulation to MS.
NS 256	Safety Requirements: Predisposal management of radioactive waste (111-S.2)	WASSAC	CSM in Oct. 97 to redraft document in line with WASSAC comments. Consideration for approval at Dec. 97 mtg. For circulation to MS.
NS 257	Safety Guide: Decommissioning of nuclear power and large research reactors (111-G6.1)	WASSAC/ NUSSAC	CSM in June 97 and possible consideration for approval at Dec. 97 mtg. for circulation to MS.

TRANSSAC

ID	Proposed Title	Committees	Status
NS 245	Safety Guide: Advisory material for the regulations for the safety transport of radioactive material	TRANSSAC	A revised draft on the basis of MS comments. To be considered by TRANSSAC in 2nd half of 1997.
NS 246	Safety Guide: Emergency response planning and preparedness for transport accidents involving radioactive material	TRANSSAC	A revised draft on the basis of MS comments. To be considered by TRANSSAC in 2nd half of 1997.

ANNEX III

Policy Issues

- Requirements for national responsibilities
- Quality assurance
- Collaboration with other international organizations
- Co-sponsorship of standards
- Revision of standards; how much, how deep and when
- Criteria for long term
- The audience for the IAEA standards; regulatory bodies or operating organizations
- Releases and long-term waste to be considered together?
- Other fuel cycle facilities (fuel fabrication, reprocessing)
- Mining and milling
- Potential exposures
- Exemption and exclusion
- Emergency preparedness
- Regulatory independence
- Standards – 'self standing' or 'reference to' related standards
- Decommissioning of non-reactor facilities

ANNEX IV

Proposed topics for peer discussion groups and Senior Regulators' Meeting

1. Assessment of safety culture
2. Role of contractors in safety
3. Deregulation and its effects on safety
4. Maintenance of licensing and design basis
5. Good practices in reporting of incidents
6. Multiagency responsibilities
7. Translation of results of research and operation into regulations
8. PSA based regulations to improve plant operation
9. Regulatory implication of high burn-up fuel
10. Assessment of regulatory effectiveness
11. Resource allocation among various regulatory activities
12. Feedback on the IAEA standards
13. Infrastructure for effective use of PSA
14. Regulations for decommissioning
15. Handling of incidents (communication with the public)
16. Aging research reactors
17. Regulatory activities on waste management (variations) and disposal (radioactive ores)
18. Exchange of personnel among regulatory bodies

Maintaining, developing and retaining professional expertise in a regulatory framework

ANNEX V

Copy of e-mail from Valentin to Bishop

Subject: IAEA ACSS: Participants from Sweden and
Author: < jack.valentin@ssi.se > at INTERNET
Date: 15/05/97 01:02

Dear Agnes,

As you know my role is changing and in the long run, that will at least have to affect the hat I will be wearing at ACSS. I do hope, however, that you will let me continue to participate even with a new hat on! Having consulted Ahmad Karbassioun at IAEA about the formalities, I am now writing to ask you to take the appropriate action during the upcoming meeting of ACSS (assuming, of course, that you are still as positive as you were when we first spoke about this).

In essence, what would be needed would apparently be that during the June meeting, you seek the Commission's approval for participation of ICRP as an observer (in the same manner as OECD/NEA is already an observer). If ACSS agrees, ICRP can then send an observer (ie, me) to the November meeting.

At the June meeting, I will be present in the same capacity as previously (ie a member appointed by Mr Blix after nomination from the Swedish Government). Currently, I am working half-time for SSI, half-time for ICRP, and this is intended to continue through June. From 1 July, I will in all likelihood be a full-time employee of ICRP. Therefore, after the June meeting, I expect to resign from membership of ACSS and we expect to make arrangements for the Swedish Government to nominate Lars-Erik Holm as a new member. However, it seems likely that ACSS would accept ICRP to send observer, and in that case ICRP will nominate me as that observer.

Lars-Erik is keen to join ACSS and has noted the tentative time frame of the November meeting in his diary. We toyed with the idea of Lars-Erik joining me at ACSS in June, but this turned out to be impossible due to meetings with our government, etc.

I look forward to hearing from you and hope that you feel it is useful to take this opportunity to bridge the gap between safety and protection specialists!

Yours sincerely, Jack Valentin

1.

PARTICIPATION

D. Beninson, Argentina
K. Lokan, Australia
A. Bishop (Chair), Canada
R.M. Duncan, Canada
Q. Huang, China
Y. Zhao, China
A-C. Lacoste, France
M. Asty, France
C. Feltin, France
R.D. Wendling, Germany
F.W. Krüger, Germany
K. Sato, Japan
K. Muramatsu, Japan
Y. K. Lim, Korea, Republic of
A. Alonso, Spain
P. Trueba-Bellido, Spain
J. Valentin, Sweden
S. Prêtre, Switzerland
S. Harbison, United Kingdom
I.F. Crawford, United Kingdom
E.L. Jordan, United States of America
G. Frescura, NEA/OECD

IAEA Staff Members

Z. Domaratzki, Deputy Director General, Department of Nuclear Safety
R. Niehaus, Acting Director, Division of Nuclear Installation Safety (NSNI)
A. Gonzalez, Director, Division of Radiation & Waste Safety (NSRW)
A. Karbassioun, Scientific Secretary, Safety Co-ordination Section
R. Campbell, Safety Assessment Section
C. Mason, Radiation Safety Section
M. Raynal, Waste Safety Section
L. Blalock, Radiation Safety Section
K. Mrabit, Safety Co-ordination Section