

Interagency Steering Committee on Radiation Standards



2003 Annual Report



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**INTERAGENCY STEERING COMMITTEE ON
RADIATION STANDARDS**

2003 ANNUAL REPORT

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FOREWORD

The Interagency Steering Committee on Radiation Standards (ISCORS) prepared this annual report for ISCORS member agencies to document ISCORS' activities and accomplishments in 2003, and plans for 2004. We wish to thank the ISCORS members for their participation and contributions to the many topics discussed over the past year regarding radiation issues important to the public; Federal, state, and local agencies; and national and international communities. In addition, we extend our compliments to all subcommittee chairs and their members for significant support and accomplishments within the past year on numerous radiation issues, and for developing useful information, examples of which are attached in this report and on the ISCORS website (www.iscors.org). The subcommittees have outlined an aggressive list of challenges for 2004 and the full committee looks forward to receiving subcommittee recommendations on the specific topics each is addressing.

The full ISCORS met in January, April, July, and October 2003. The July 2003 meeting was open to the public for observation. At each full committee meeting, the subcommittees reported on their yearly activities and progress. The full committee also reviewed and received focused presentations on a wide variety of special topics, some of which included the following:

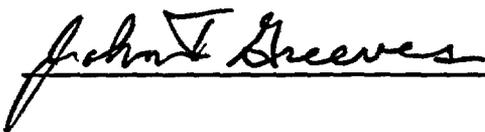
- Federal Guidance for the General Public;
- Draft and final sewage sludge survey related documents; and
- Updates on the activities of the International Commission on Radiation Standards, the National Commission on Radiation Standards, and the National Academies.

Over the past few years, the full ISCORS committee has established a strong intragovernmental working relationship that benefits each member agency and significantly aids in identifying topics of interest to each agency. For both member representatives and the public, the ISCORS process and accomplishments are made visible by the annual report. We appreciate comments on this annual report and will use them to consider how ISCORS might better carry out its responsibilities. You may send comments on the report to Ms. Susanne Woods (U.S. NRC, Mail Stop T-7J8, Washington, DC 20555), or Mr. Reid Rosnick (U.S. EPA, Office of Radiation and Indoor Air (6608J), 1200 Pennsylvania Avenue, NW, Washington, DC 20460).

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HISTORICAL INFORMATION

The Interagency Steering Committee on Radiation Standards (ISCORS) was formed in response to October 27, 1994, letters from Senator John Glenn to the U. S. Nuclear Regulatory Commission (NRC); the U.S. Environmental Protection Agency (EPA); and the Office of Science and Technology Policy (OSTP). In this letter, Senator Glenn charged the EPA and the NRC, in coordination with the Committee on Interagency Radiation Research and Policy Coordination (CIRRPC), to develop a plan for a "path forward" to address the inconsistencies, gaps, and overlaps in current radiation protection standards. ISCORS is one of the committees OSTP recommended for achieving the goals of the now defunct CIRRPC. The objectives of the ISCORS include the following: (1) facilitating a consensus on acceptable levels of radiation risk to the public and workers; (2) promoting consistent risk-assessment and risk-management approaches in setting and implementing standards for occupational and public protection from ionizing radiation; (3) promoting completeness and coherence of federal standards for radiation protection; and (4) identifying interagency issues and coordinating their resolution.

Since its inception, the NRC and the EPA have co-chaired the ISCORS. The current co-chairs are John T. Greeves, NRC, and Frank Marcinowski, EPA. In addition to the NRC and the EPA, ISCORS membership also includes senior managers from the U.S. Department of Defense; the U.S. Department of Energy (DOE); the U.S. Department of Labor Occupational Safety and Health Administration (OSHA); the U.S. Department of Transportation (DOT); and the U.S. Department of Health and Human Services (DHHS). Representatives of the Office of Management and Budget (OMB), OSTP, and various states are observers at meetings. Committee meetings involve pre-decisional intragovernmental discussions and, as such, are not normally open for observation by members of the public or media. However, summary meeting notes are available at the ISCORS website, (www.ISCORS.org). The Committee does not act as a decision-making body. Instead, it provides recommendations and summaries of its activities on specific issues to both the heads of member agencies, and to OMB and OSTP, via an annual report. The Committee meets approximately once each calendar quarter. It held its first meeting on April 5, 1995.

The full ISCORS committee has established subcommittees, as needed, to conduct its technical work (e.g., to address specific issues of concern or significant interest). ISCORS has formed the following subcommittees: Clean-up; Mixed Waste; Recycle; Risk Harmonization; Sewage Sludge; Naturally Occurring Radioactive Materials (NORM); and Federal Guidance. The subcommittee activity section of this report summarizes each subcommittee's activities. No new subcommittees were formed in 2003.

SUMMARY OF SUBCOMMITTEE ACCOMPLISHMENTS IN 2003 AND PLANNED ACTIVITIES FOR 2004

Clean-up Subcommittee Highlights

Subcommittee Chair: Anthony Wolbarst, EPA (202-343-9392)

The Clean-up Subcommittee serves as a forum for exchanging information and promoting partnerships addressing radiation clean-up standards and guidance.

Accomplishments in Calendar Year 2003 (CY 2003)

Continuation of a Project -The Subcommittee made significant progress in the development of the on-line ***ISCORS Catalog of References to Parameter Values and Distributions Used in Environmental Pathway Modeling for Cleanup of Sites Contaminated with Radioactivity***. This web-based catalog is indexed, searchable, readily up-dateable, and user-friendly as a compilation of references, compendia, databases, and other sources of peer-reviewed information on parameters used in contaminant transport and exposure modeling. The ***Parameter-Source Catalog*** does not contain values or distributions for any particular parameter; rather, it provides references to published materials and links to modeling web sites where such information can be obtained. The catalog will be filled on an on-going basis primarily through submissions by the users themselves. Specifically, there is a mechanism in place through which users can easily submit proposed references to the web site managers. Then, after the cited references are vetted in the QA process (including acceptance criteria such as publication in a peer-reviewed technical journal, or appearance in a formally-issued Federal or state agency report), references are entered automatically into the database. Built using a Microsoft Access 2000 relational database, the system offers subject- and text-search capabilities, as well as provides information on: parameter definitions and methods of measurement; transport/exposure pathways; and standard models and codes.

The ***Parameter-Source Catalog*** is intended for use by professionals, managers, and others involved or interested in the use of pathway modeling to estimate doses and risks associated with sites contaminated with radioactive or other hazardous materials. It should be ready for public release on the ISCORS website in the Spring of 2004.

Activities Planned for CY 2004-2005:

The primary concern of the Subcommittee will be the release, maintenance, and further development of the *Parameter-Source Catalog*. Issues of concern are: develop and implement plans to bring the catalog website to the attention of large numbers of potential users; provide technical support and a channel for feed-back from users; and ensure the routine and efficient updating and expansion of catalog contents.

Possible Project:

Depending on agency interest and resources, the Subcommittee *may* initiate work on a second project: a report on Federal and state agency policies and practices that underlie or strongly influence environmental pathway modeling. Some of the issues of interest are: comparison of rulemaking, screening, and compliance demonstration modeling; requirements for model and data quality assurance/quality control; comparison of deterministic and probabilistic modeling; demonstration of compliance with probabilistic and other dose/risk limits; comparison of conservative and best estimate parameter values; determination of the need for site-specific data; application of default values and distributions in the absence of site-specific data; comparison of peak dose and lifetime risk; dealing with background radiation; combining chemical and radiation risks; peer review; expert judgement; and other policy-related topics. The report would contain publicly available information on relevant agency policies, but will not comment on them or be judgmental of them.

Mixed Waste Subcommittee Highlights

Subcommittee Chair: Gus Vazquez, DOE (202-586-7629)

The Mixed Waste Subcommittee is a forum for exchanging information on hazardous-radioactive waste (mixed waste).

Accomplishments in CY 2003

The Subcommittee met once in May 2003, and continued coordination via electronic mail and telephone. The Subcommittee was unable to meet its expected goals primarily because of member schedule delays.

EPA began moving forward on its Low Activity Radioactive Waste (LARW) initiative in 2002 and in to 2003. DOE and State representatives agreed not to pursue parallel development of Radiological Control Criteria (RCC). Rather, DOE and State representatives agreed to refocus RCC efforts to support the new LARW initiative because it will be based on a Federal rulemaking. In December 2002, DOE received an official letter from the CRCPD E-5 Committee chairperson regarding the E-5 Committee general agreement and concurrence with the technical work underlying RCC, and recommending that this work be used to support the LARW initiative. The EPA Announcement of Proposed Rulemaking for LARW was officially published for comment in November 2003.

Activities Planned for CY 2004:

Subcommittee members were polled in December 2002 to determine their views on future goals: provide review and input to the EPA LARW initiative; and continue the Subcommittee mixed waste forum for exchange.

Recycle Subcommittee Highlights

Subcommittee Chair: Robert A. Meck, NRC (301-415-6205)

The Recycle Subcommittee reviews issues on radiological control of materials.

Accomplishments in CY 2003:

1. **Federal Agency Activities** -The subcommittee kept well informed of Federal agency activities. DOE is preparing the Programmatic Environmental Impact Statement on the disposition of metals with very low levels of associated radioactivity. Active information exchanges informed other agencies on NRC efforts to consider alternatives for disposition of solid materials with very low levels of associated radioactivity.
2. **International Developments** -The International Atomic Energy Agency (IAEA) continued its efforts to develop radioactivity concentrations that can be applied to exclusion, exemption, and clearance. In August, the Subcommittee served as the focal point for combining the U.S. comments on IAEA Draft Guide DS-161, entitled, "Application of the Concepts of Exclusion, Exemption and Clearance," which were provided to NRC for the collective U.S. comments.
3. **Orphan Source Control** -The nationwide effort to collect orphan radioactive sources (sources that no longer are in the possession of a responsible party) continues with funding from NRC and DOE. EPA is continuing the monitoring of imported scrap metal at two U.S. ports. At one port, for example, the monitoring of over 1.4 million gross tons of scrap metal has been completed to date. EPA initiated a Product Stewardship initiative with industry, manufacturers, distributors, the States and other Federal agencies, including NRC and DOE. The purpose of this program is to develop a strategy for addressing management of the radioactive component in both fixed (attached in place) gauges and tritium exit signs at the end of their use (i.e., "end-of-life management").
4. **Membership** -The subcommittee continued efforts to recruit new members to ensure a broad representation of federal agencies.
5. **Forum** -The subcommittee continued as an information exchange and met when members expressed a need for information exchange on a topic in scope.

Activities Planned for CY 2004:

1. Provide a forum for interagency information exchanges in the following areas: disposition of solid materials; orphan source identification and management; and issues related to the import and export of materials (e.g., metal) with radioactivity.
2. Continue to recruit members from agencies that may be impacted by regulations in the areas addressed by this Subcommittee.

Risk Harmonization Subcommittee Highlights

Subcommittee Chair: Edward Regnier, DOE (202-586-5027)

The Risk Harmonization Subcommittee was initiated to review similarities and differences between NRC and EPA risk assessment and risk management approaches.

Accomplishments in CY 2003:

1. **Forum for Information Exchange** -The Subcommittee provided a forum for information exchange and coordination between agencies on issues and events related to risk assessment and risk management.
2. **Institutional Controls** -The Subcommittee studied the use of institutional controls as part of the overall protective approach for disposal of radioactive waste. The Subcommittee worked on a narrative description of these tables and of issues concerning the use of institutional controls.
3. **Optimization Methods** -The Subcommittee developed a draft table summarizing the requirements in statutes, Executive orders, and OMB guidance related to the use of optimization methods (e.g., cost-benefit analysis, ALARA analysis, and multiattribute analyses) to support regulatory decision making.

Activities Planned for CY 2004:

1. Provide a continuing forum for information exchange between the agencies on matters related to risk assessment and risk management.
2. Finalize draft tables summarizing the requirements in statutes, Executive orders, and OMB guidance related to the use of optimization methods (e.g., cost-benefit analysis, ALARA analysis, and multiattribute analyses) to support regulatory decision making.
3. Incorporate the revised EPA regulations for disposal of high-level waste at Yucca Mountain, 40 CFR 197, into the institutional control tables. Complete a narrative description of these tables.
4. Monitor national and international organization activities related to risk harmonization and inform the main ISCORS Committee.

Possible Projects:

1. Prepare a white paper discussing issues and philosophies concerning the use of institutional controls.
2. Conduct further review and analysis of the requirements in statutes, Executive orders, and OMB guidance related to the use of optimization methods to support regulatory decision making.
3. Develop a set of principles on the use of institutional controls which will represent agreed upon basic policies on the need for such controls, as well as their appropriate use and implementation.
4. In conjunction with the Clean-up Subcommittee, hold a workshop on land use scenarios for risk assessments related to release of land following remediation.

Sewage Sludge Subcommittee Highlights

Subcommittee Co-chairs: Bob Bastian, EPA (202-260-7378)
William Ott, NRC (301-415-7484)

The Sewage Sludge Subcommittee is conducting an NRC/EPA joint survey to collect information concerning radioactive materials in sewage sludge and ash from sewage treatment plants [referred to in industry as publicly owned treatment works (POTWs)], conduct dose modeling to help with the interpretation of the results of the survey, and to develop final guidance on this subject for the POTW owners and operators. This survey is being conducted to respond to recommendations from the General Accounting Office to 1) determine the extent to which radioactive contamination of sewage sludge and ash is occurring; 2) notify the POTWs that receive discharges from NRC's and Agreement State's licensees of the potential for radioactive concentration in the sludge and the possibility that they may need to test or monitor their sludge for radioactive content; and 3) establish limits for radioactivity in sludge and ash to ensure the health of treatment plant workers and the public.

Accomplishments in CY 2003:

1. **Sewage Sludge Survey Results and Analysis** -The survey results were presented in a final ISCORS Technical Report 2003-02 (November 2003), ***ISCORS Assessment of Radioactivity In Sewage Sludge: Radiological Survey Results and Analysis*** (NUREG-1775; EPA832-R-03-002; DOE/EH-0669) that was posted on the ISCORS web site. The availability of this final report was announced in a Federal Register notice (Vol.68, No.228: 66503-66504) published on November 26, 2003, by NRC for ISCORS.
2. **Dose Assessment** -The results of the dose modeling effort were presented in a draft final ISCORS report, ISCORS-2003-03 (November 2003), ***Assessment of Radioactivity In Sewage Sludge: Modeling to Assess Radiation Doses*** (NUREG-1783; EPA832-R-03-002A; DOE/EH-0670) that was posted on the ISCORS web site. The availability of this draft final report for public comment was announced in a Federal Register notice (Vol.68, No.228: 66503-66504) published on November 26, 2003, by NRC for ISCORS. A formal peer review of the draft final dose modeling document was initiated by the Subcommittee with its goal aimed at completing the peer review during the public comment period (formally scheduled to close on February 6, 2004).
3. **Guidance Document** -A draft final version of the POTW guidance document was posted on the ISCORS web site, ISCORS Technical Report 2003-04 (November 2003), ***Assessment of Radioactivity In Sewage Sludge: Recommendations on Management of Radioactive Materials In Sewage Sludge and Ash at Publicly Owned Treatment Works*** (DOE/EH-0668; EPA832-R-03-002B). The availability of this draft final report for public comment was announced in a Federal Register notice (Vol.68, No.228: 66503-66504) published on November 26, 2003, by the NRC for ISCORS.

Activities Planned for CY 2004:

1. Complete peer review of the draft final dose modeling document.
2. Present ISCORS with a summary of peer review comments on the draft final dose modeling document and comments received from the public in response to the November 26, 2003 Federal Register notice that provided access to the survey report, draft final dose modeling document, and draft final POTW guidance document.
3. Finalize the dose modeling document to address issues raised by the peer reviewers and comments received during the public review period.
4. Finalize the POTW guidance document to address comments received during the public review period.
5. Submit the final dose modeling and guidance documents for ISCORS approval to issue.
6. Issue the final dose assessment report document.
7. Issue the final guidance document for POTWs.
8. Present the results of the survey and dose modeling efforts and recommendations in the guidance document at various conferences and meetings (WEF, AMSA, CRCPD, state meetings, etc.) and in papers for publication in technical journals, conference proceedings, newsletters, etc.
9. Conduct any follow-on efforts approved by ISCORS.
10. Sunset the Sewage Sludge Subcommittee.

NORM Subcommittee Highlights

Subcommittee Chair: Loren Setlow, EPA (202-343-9445)

The NORM Subcommittee mission is to ensure effective communication and coordination among member agencies involved with regulatory, oversight, and disposal issues for naturally-occurring radioactive materials (NORM) and products containing NORM.

Accomplishments In CY 2003:

1. Held 2 meetings this year, with members from seven Federal and one state agency.
2. Reviewed and commented on ISCORS Sewage Sludge Subcommittee draft reports and the Federal Guidance Subcommittee draft Federal Guidance for the General Public.
3. Provided an opportunity for exchanges of information and updates for ongoing member agency programs, including the NRC Jurisdictional Working Group.
4. Provided updates on status of proposed draft Part N model regulation for TENORM from the CRCPD, and Health Physics Society ANSI draft standard for TENORM.
5. Provided updates and information regarding upcoming and recently held international meetings on NORM/TENORM, including IAES technical meetings and working groups.

Activities Planned for CY 2004:

1. Provide input as appropriate to ongoing projects of the ISCORS Federal Guidance Subcommittee, and other subcommittees as requested.
2. Review and comment on the EPA draft technical Report on Uranium Mining TENORM, when available.
3. Continue to receive updates on the CRCPD Part N model regulation and the ANSI draft standard for TENORM.
4. Provide comments on the draft IAEA report on NORM/TENORM and other international reports obtained by member agencies.

Federal Guidance Subcommittee Highlights

Subcommittee Co-Chairs: Michael Boyd, EPA (202) 343-9395
Donald Cool, NRC (301) 415-6347

This Subcommittee works with the EPA to produce Federal Guidance, including Presidential Guidance and technical reports, that supports the development of consistent national radiation protection standards and implementing guidance. The subcommittee serves as the forum for coordination among federal and state government agencies interested in any or all aspects of Federal Guidance. The forum ensures that all agencies have opportunities for input before and during development of Federal Guidance.

Accomplishments in CY 2003:

1. **Federal Guidance for the General Public (FGGP)** -This updated guidance, which would be signed by the President, advises Federal agencies on protection of the general public from exposure to ionizing radiation. The current guidance dates back to the Eisenhower administration and was signed in 1960. An EPA-drafted version of the FGGP was distributed to the Subcommittee for comment in March, 2003. At a meeting of ISCORS representatives with the OMB on April 8, 2003, it was agreed that EPA should draft another version of the FGGP that presented the public with two options: a non-numerical version (i.e., the March draft of the guidance) without prescribed dose limits; and a numerical version with dose limits. Both versions rest on the principles of justification, optimization, and limitation, with the non-numerical approach leaving the setting of dose limits up to the individual agencies. EPA presented the Subcommittee with an updated version in August which was discussed at regular subcommittee meetings in September and October. In order to expedite the review and comment resolution process, the Subcommittee held two 2-day writing sessions in November and December. At the close of the second meeting on December 19, 2003, the Subcommittee completed a staff-level consensus document which was delivered to the ISCORS representatives and their agencies for senior management review and approval. At the close of 2003, this process was ongoing, with the expectation that the agencies would again meet with OMB in early 2004. Following OMB approval and publication for comment in the Federal Register, EPA anticipates an active stakeholder outreach effort in 2004.
2. **White Paper on New Dosimetric Methods** -The Subcommittee delayed progress on this effort while pursuing completion of the FGGP. The Subcommittee continues to follow the development of new recommendations by the ICRP, due out in 2005. Possible changes to ICRP-based dosimetric methodology will be analyzed by the Subcommittee and presented to ISCORS as information becomes available.
3. **Ecorisk** -During 2003, the Subcommittee continued to support the informal Ecological Radiological Working Group (ECORAD-WG) led by DOE and coordinated under the oversight of this ISCORS Subcommittee. The ECORAD-WG continued to coordinate, participate in, and exchange information on national and international guidance and methods development initiatives regarding the evaluation of radiation as a stressor to the environment. The principal activity of the ECORAD-WG during the past year was the

completion of the RESRAD-BIOTA code. The code was designed to be consistent with and provide a tool for implementing the DOE graded approach for biota dose evaluation, and to provide advanced analysis capabilities that could support the anticipated needs of the participating agencies (DOE, EPA, and NRC). An ISCORS technical report that provides a user's guide for the code was also completed and is available from the ISCORS Web Site. Members of the ECORAD-WG also attended the International Conference on the Protection of the Environment from the Effects of Ionizing Radiation in Stockholm, Sweden, from October 6 to 10, 2003, which was organized by the IAEA and other sponsoring organizations. DOE presented an invited paper on its regulatory and evaluation framework for radiation protection of the environment; ECORAD-WG members from DOE, EPA, and NRC co-authored a poster paper on the RESRAD-BIOTA code.

Activities Planned for CY 2004:

1. Assuming that the FGGP is published for public comment in 2004, support EPA as they analyze and respond to the comments and resolve any outstanding concerns prior to seeking OMB and White House approval for issuing final Federal Guidance for the General Public in 2004.
2. Following release of the ICRP draft proposed new recommendations for public consultation, prepare a written discussion of the issues involved in adopting these new recommendations in the U.S. The discussion should explore, in a qualitative manner, the steps necessary for accommodating up-to-date recommendations and science in assessing dose.
3. Discuss and prepare a recommendation for ISCORS on the need for updating or reissuing Radiation Protection Guidance to Federal Agencies for Diagnostic X-rays (43 FR 4377 February 1, 1978). Ensure that all affected agencies are represented on the subcommittee.

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SUBCOMMITTEE MEMBER LIST

Subcommittee members conduct reviews on specific issues to bring to the full ISCORS membership for consideration and decisions.

CLEANUP SUBCOMMITTEE

<u>ORGANIZATIONS</u>	<u>MEMBERS</u>	<u>PHONE NUMBER</u>
EPA	Tony Wolbarst, Chair Bonnie Gitlin Stuart Walker	202-343-9392
NRC	Ralph Cady Boby Abu-Eid Mark Thaggard Tin Mo	
DOD DOE States	Julie Peterson Stephen Domotor Phil Egidi, Colorado	

MIXED WASTE SUBCOMMITTEE

<u>ORGANIZATIONS</u>	<u>MEMBERS</u>	<u>PHONE NUMBER</u>
DOE	Gus Vazquez, Chair Jim Antizzo William Fortune Ed Regnier Andy Wallo	202-586-7629
EPA	David Levenstein Dan Schultheisz	
NRC DOD DOT States	Suzanne Woods Kelly Crooks Fred Ferate David Allard, Pennsylvania	

RECYCLE SUBCOMMITTEE

ORGANIZATIONS	MEMBERS	PHONE NUMBER
NRC	Robert Meck, Chair Doug Broaddus Elaine Brummett Frank Cardile Carl Feldman Giorgio Gnugnoli Tony Huffert	301-415-6205
EPA	Deborah Kopsick Mary Clark	
DOD	CAPT Dave Farrand	
DOE	Gus Vazquez Lee Bishop John Neave	
DOL/OSHA States	David Hamel Steve Collins, Illinois	

RISK HARMONIZATION SUBCOMMITTEE

ORGANIZATIONS	MEMBERS	PHONE NUMBER
DOE	Edward Regnier, Chair Colleen Ostrowski	202-586-5027
EPA	Mike Boyd Ernesto Brown David Pawel Stuart Walker	
NRC	Dennis Damon James Kennedy	
DOD	Michael Schaeffer	
DOL/OSHA	Dave Hamel	
DOT	Fred Ferate	
States	Jill Lipoti, New Jersey	
Institutional Controls Workgroup		
NRC	James Kennedy	
EPA	Ernesto Brown	
DOE	Colleen Ostrowski	
Optimization Workgroup		
NRC	Dennis Damon	
EPA	Mike Boyd	
DOE	Ed Regnier	

SEWAGE SLUDGE SUBCOMMITTEE

ORGANIZATIONS	MEMBERS	PHONE NUMBER
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NRC	William Ott, Co-Chair Lydia Chang Giorgio Gnugnoli Andrea Jones Tom Nicholson Stephen Salomon Duane Schmidt	301-415-7484
DOE	James Bachmaier Judy Kosovich	
States	Jenny Goodman, New Jersey	
Local Government	Kevin Aiello, Middlesex County Utilities Authority Tom Lenhart, Northeast Ohio Regional Sewer District	

NORM SUBCOMMITTEE

ORGANIZATIONS	MEMBERS	PHONE NUMBER
EPA	Loren Setlow, Chair	202-343-9445
NRC	Katherine Mattsen	
DOE	Bill Hochheiser Alexander Williams	
DOT	Fred Ferate	
OSHA/DOL	David Hamel	
DOD	CMDR Bill Adams Ramchandra Bhatt CAPT David Pugh	
States	Walter Cofer, Florida	

FEDERAL GUIDANCE SUBCOMMITTEE

<u>ORGANIZATIONS</u>	<u>MEMBERS</u>	<u>PHONE NUMBER</u>
EPA	Mike Boyd, Co-Chair Phillip Newkirk David Pawel Jerry Puskin Lowell Raiston Loren Setlow Stuart Walker	202-343-9395
DOE	Steve Domotor Andy Wallo	
NRC	Donald Cool, Co-Chair Roger Pedersen Sami Sherbini	301-415-6347
DOT	James Williams	
HHS	Sam Keith	
OSHA/DOL	Dave Hamel	
DOD	Mike Schaeffer	
DNFSB	Dan Burnfield	

APPENDIX A
ISCORS Charter

**CHARTER FOR
INTERAGENCY STEERING COMMITTEE ON RADIATION STANDARDS**

Purpose of Committee

The purpose of this committee is to foster early resolution and coordination of regulatory issues associated with radiation standards.

Membership

1. Agencies represented on the committee include the U.S. Environmental Protection Agency, U.S. Nuclear Regulatory Commission, U.S. Department of Energy, U.S. Department of Defense, U.S. Department of Transportation, the Occupational Safety and Health Administration of the U.S. Department of Labor, the U.S. Department of Health and Human Services, and any successor agencies.
2. The Office of Science and Technology Policy and the Office of Management and Budget will be invited as observers at meetings because of their responsibilities for coordination of science policy and regulation policy, respectively.
3. The committee will be co-chaired by the EPA and NRC representatives for the first two years, after which the committee will determine whether the chairmanship should be rotated among additional agencies, or whether the chairmanship should be held by a single agency.
4. Other departments and agencies will be invited to participate in forming consensus for specific issues as voting members when their interests and responsibilities are involved.

Objectives

The objectives of the committee include the following:

1. Facilitate a consensus on allowable levels of radiation risk to the public and workers.
2. Promote consistent and scientifically sound risk assessment and risk management approaches in setting and implementing standards for occupational and public protection from ionizing radiation.
3. Promote completeness and coherence of Federal standards for radiation protection.
4. Identify interagency radiation protection issues and coordinate their resolution.

Implementation

The committee will conduct its activities in accordance with the attached understandings and procedures.

UNDERSTANDINGS AND PROCEDURES FOR
THE INTERAGENCY STEERING COMMITTEE ON RADIATION STANDARDS

Participation

1. Various offices and agencies within each agency may participate in the committee meetings. Each agency will develop a unified position and present that position at committee meetings. Each agency representative is responsible for developing their coordinated agency position in preparation for reaching committee consensus.
2. Agencies will be represented at the meetings by senior level, career government employees, who are engaged in policy matters for the agency.
3. Official agency representatives will be identified in writing to the co-chairpersons by the Assistant Administrator, Secretary, or Commissioner, as appropriate.
4. Committee meetings involve pre-decisional intragovernmental discussions and, as such, are not open for observation by members of the public or media.
5. The committee may, from time to time, revise the charter based on the consensus views of the committee, including such items as membership, responsibility for chairing the committee, and objectives.

Decisions

1. The committee has not been delegated any authorities established by law, regulation, Executive Order, or other administrative mechanism to act in lieu of formal agency action. The objectives of the committee are described in the committee charter.
2. The committee will make every effort to base decisions on consensus. Consensus reflects acceptance among the voting agencies.
3. Each agency will have a single vote in reaching consensus on specific issues. If a consensus cannot be reached, committee recommendations will reflect the lack thereof and include the opportunity for agencies to attach minority views to any documentation of the recommendations.
4. Recommendations on specific issues will be provided to the heads of member agencies, OMB, and OSTP.

Meetings

1. Responsibility for hosting the meetings will rotate among the agencies. The host agency is responsible for developing a mutually agreeable meeting date and time, informing the agencies at least two weeks in advance of the

meeting date, distributing a draft agenda for the meeting, arranging for a meeting facility, and documenting and distributing summary meeting notes.

2. Summary meeting notes will be provided by the host agency to designated representatives of each of the member agencies, OMB, OSTP, and, as appropriate, Congressional contacts and other groups. The host agency will distribute draft notes within one week of the committee meeting and final meeting notes at least two weeks before the next committee meeting. NRC will also place a copy of the summary meeting notes in the Public Document Room.

3. The committee will establish a plan for approximately a six-month period. Specific agendas will be developed for each meeting based on the general plan.

4. The committee will meet approximately once each calendar quarter, with more frequent meetings, as needed to address specific issues.

Subcommittees

1. The committee may create subcommittees to focus on specific issues or activities (e.g., recycling criteria, risk harmonization, cleanup standards). Subcommittees will follow the same understandings and procedures as the full committee.

2. Subcommittees will meet at a frequency and location as determined necessary by the subcommittee.

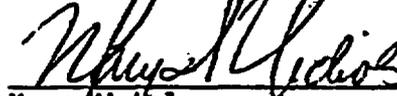
FOR THE U.S. NUCLEAR REGULATORY COMMISSION,



Hugh L. Thompson, Jr.
Deputy Executive Director for
Nuclear Materials Safety,
Safeguards and Operations Support

12-18-95
Date

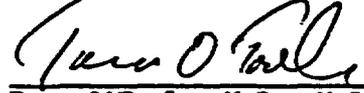
FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY,



Mary Nichols
Assistant Administrator
Office of Air and Radiation

1-16-96
Date

FOR THE U.S. DEPARTMENT OF ENERGY,



Tara O'Toole, M.D., M.P.H.
Assistant Secretary for
Environment, Safety and
Health

2/4/96
Date

FOR THE U.S. DEPARTMENT OF DEFENSE,



Paul G. Kaminski
Under Secretary of Defense
(Acquisition & Technology)

JUL 12 1996
Date

FOR THE U.S. DEPARTMENT OF TRANSPORTATION,



Dr. Dharmendra K. Sharma
Administrator
Research and Special Programs
Administration

OCT 24 1996
Date

FOR THE U.S. DEPARTMENT OF LABOR,



Greg Watchman
Acting Assistant Secretary for
Occupational Safety and
Health Administration

3/21/97
Date

FOR THE US DEPARTMENT OF HEALTH AND HUMAN SERVICES



Jo Ivey Boufford, M.D.
Acting Assistant Secretary for Health

5-16-97

Date

APPENDIX B
Glossary

ACRONYM LIST

ACNW	Advisory Committee on Nuclear Waste
ALARA	As low as is reasonably achievable (radiation dose)
AMSA/WEF	American Metropolitan Sewage Association/ Water Environmental Federation
ANSI	American National Standards Institute
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIRRPC	Committee for Interagency Radiation Research and Policy Coordination
CRCPD	Conference of Radiation Control Program Directors
DHHS	Department of Health and Human Services
DOE	Department of Energy
DOL	Department of Labor
DOT	Department of Transportation
ELI	Environmental Law Institute
EPA	Environmental Protection Agency
FGGP	Federal Guidance for the General Public
IAEA	International Atomic Energy Agency
ICRP	International Commission on Radiation Protection
ISCORS	Interagency Steering Committee on Radiation Standards
NCRP	National Council on Radiation Protection and Measurements
NORM	Naturally Occurring Radioactive Material
NRC	Nuclear Regulatory Commission
OMB	Office of Management and Budget
OSHA	Occupational Safety and Health Administration

OSTP	Office of Science and Technology Policy
PAG	Protective Action Guide
POTW RCC	Publicly-Owned Treatment Works Radiological Control Criteria
RCRA	Resource Conservation and Recovery Act
TENORM	Technologically Enhanced Naturally Occurring Radioactive Material

Radiation Unit Abbreviations

mrem/y	millirem/year
Sv/a	Sievert per annum

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Division of Waste Management and Environmental Protection, Office of Nuclear Material Safety and Safeguards,
U.S. Nuclear Regulatory Commission, Washington, DC 20555

9. SPONSORING ORGANIZATION - NAME AND ADDRESS *(If NRC, type "Same as above"; if contractor, provide NRC Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address.)*

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10. SUPPLEMENTARY NOTES

11. ABSTRACT *(200 words or less)*

The Interagency Steering Committee on Radiation Standards (ISCORS) prepared this annual report for ISCORS member agencies to document the ISCORS calendar year 2003 activities and plans for calendar year 2004. The report identifies both past accomplishments and goals for the future. The objectives of ISCORS include: (1) facilitating a consensus on acceptable levels of risk to the public and workers; (2) promoting consistent risk assessment and risk management approaches in setting and implementing standards for occupational and public protection from ionizing radiation; (3) promoting completeness and coherence of Federal standards for radiation protection; and (4) identifying interagency issues and coordinating their resolution.

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