

MEMORANDUM TO:

Chairman Meserve
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield

December 18, 2000

FROM:

William D. Travers */RA by Carl J. Paperiello Acting For/*
Executive Director for Operations

SUBJECT:

QUARTERLY REPORT TO THE COMMISSION ON PROGRESS
MADE ON PERTINENT ISSUES RELATED TO CONTROL OF
SOLID MATERIALS

On March 23, 2000, the Staff provided the Commission with a paper (SECY-00-0070) which provided information on results of public meetings, status of technical analyses, and recommendations for proceeding on issues concerning the control of solid materials. In an SRM, dated August 18, 2000, the Commission directed the staff to: (1) defer a final decision on whether to proceed with rulemaking, (2) proceed with a National Academies study on possible alternatives for release of slightly contaminated materials, (3) continue the development of the technical information base necessary to support a Commission policy decision in this area, and (4) stay informed of other activities in this area, including international initiatives and related EPA and DOS activities.

The SRM also directed the staff to provide quarterly reports to the Commission on progress made on all pertinent issues, and approximately three months after completion of the National Academies study, to provide its recommendations on how best to proceed, and to report the status of the technical bases. In response to the direction in the SRM for quarterly reports, the attached quarterly report provides a summary of progress made on pertinent issues.

Attachment: As stated

cc: SECY
OGC
OCA
OPA
CIO
CFO

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Quarterly Report to the Commission on Progress Made on Pertinent Issues
Related to Control of Solid Materials
December 2000

Background

On March 23, 2000, the staff provided the Commission with a paper (SECY-00-0070) which provided information on results of public meetings, status of technical analyses, and recommendations for proceeding on issues concerning the control of solid materials.

In an SRM, dated August 18, 2000, the Commission directed the staff to:

- (1) defer a final decision on whether to proceed with rulemaking,
- (2) proceed with a National Academies study on possible alternatives for release of slightly contaminated materials,
- (3) continue the development of technical information base necessary to support a Commission policy decision in this area, and
- (4) stay informed of international initiatives in this area, related U.S. Environmental Protection Agency (EPA) and Department of State (DOS) activities, and potential for import and trade issues.

The SRM also directed the staff to provide quarterly reports to the Commission on progress made on all pertinent issues and, approximately three months after completion of the National Academies study, to provide its recommendations on how best to proceed, as well as the status of the technical bases.

In response to the direction in the SRM for quarterly reports, this report provides a summary of progress made on pertinent issues. It is organized numerically by the directions provided in the August 18, 2000, SRM.

1. Actions related to rulemaking/public input

- Consistent with the direction in the August 18, 2000, SRM, rulemaking efforts, including those specifically related to development of an EIS and RIA, have been deferred.
- In September 2000, NUREG/CR-6682 was published. NUREG/CR-6682 summarizes and categorizes public comments on the June 30, 1999, Issues Paper, that were received at the fall 1999 public meetings and in over 800 letters.
- The NRC website for this activity, <http://www.nrc.gov/NMSS/IMNS/controlsolids.html>, has been kept up to date providing information on the status of ongoing regulatory activities, including the August 18, 2000, SRM, the National Academies contract, and publication of NUREG/CR-6682.

2. Actions related to proceeding with National Academies study of alternatives

- On August 31, 2000, a contract was awarded for the National Academies study. The contract calls for a report 12 months after the finalization of the review committee.
- The staff met with the National Research Council/National Academies on October 24, 2000 to provide documents and other references needed for the study.
- On November 9, 2000, a list of “provisional” committee members was posted on the National Academies’ website for a twenty-day public comment period.
- The NRC staff is coordinating with the National Academies to prepare an agenda that includes 2-3 technical briefings for the initial meeting of the committee tentatively scheduled for January 3-5, 2001.

3. Continuing development of a technical information base

Consistent with the August 18, 2000, SRM, the staff is developing a technical information base to support a Commission policy decision in this area. Developing this information represents a multi-disciplinary effort between NMSS and RES.

3a. Review of NUREG-1640

- In March 1999, NUREG-1640 was published for public comment. NUREG-1640 contains the technical basis for estimating individual doses for steel, aluminum, copper and concrete.
- In June 2000, a contract was awarded to the CNWRA to conduct an independent technical review of NUREG-1640, as a result of comments from the fall 1999 public meetings. The CNWRA technical review of NUREG-1640 was provided to RES on November 15, 2000.
- The CNWRA found that SAIC generally performed a high-quality analysis. The CNWRA also provided suggestions for future work including the addition of three exposure scenarios. The staff is currently conducting a detailed review of the CNWRA report.
- The staff is assessing the comments received at the public workshops and received in response to the Federal Register notice, as well as the CNWRA report, to develop a schedule for issuing the final NUREG-1640.

3b. Technical Basis Contract for Inventory, Doses, and Costs

- This contract is to develop information on inventory of solid material potentially available for release, potential collective doses and the potential for exposure to multiple sources, and costs associated with handling of these materials.
- This contract was re-bid as a result of conflict of interest issues identified with the previous contractor, SAIC. On August 11, 2000, a solicitation for contract bids was

posted on the NRC website. On September 11, 2000, proposals were received and reviewed. Best and final proposals were received on November 27, 2000; a final evaluation report is being prepared and a contract award is anticipated by the end of the year.

3c. Development of dose models for clearance of soil

- In July 2000, draft NUREG-1725 was issued for public comment. NUREG-1725 is part of the staff's effort to develop a technical basis for estimating exposures from potential re-use of soil. The public comment period on NUREG-1725 closed on November 17, 2000. Over 100 public comment letters and e-mails have been received. The final NUREG is scheduled to be issued in November 2001.
- The NRC staff is using the information in NUREG-1725, and comments received, to characterize scenarios, parameters, and models for soils reuse.
- A statement of work has been prepared and will be provided to the CNWRA in mid-December 2000. This work is to provide the staff with technical assistance by performing a scoping analysis of potential doses from exposure to soils released from NRC-licensed facilities. A draft NUREG report is scheduled to be provided in September 2001.

3d. Surveys

- The staff is developing information concerning the ability to conduct radiation surveys of solid materials at levels near background.
- Coordinated contract support efforts are ongoing on clearance survey procedures using common off-the-shelf instrumentation (Environmental Measurements Laboratory (EML)) and on advanced instrumentation and analytical approaches for the assay of residual radioactivity in, and on, solid materials (Oak Ridge Institute for Science and Engineering (ORISE)). These reports will be issued as a combined draft NUREG on surveys on control of solid materials in September 2001. A proof-of-concept report to test the subsurface measurement modeling developed by EML is being developed and is expected to be issued about August 2001.

4. Other actions

4a. International initiatives

- In June 2000, staff consulted in Vienna, Austria with representatives from the U.K., Germany, and EPA staff. The consultation was on the assumptions and parameters used to derive the IAEA's clearance levels. IAEA has developed separate clearance levels for radionuclides that are based on a 10 μ Sv per annum criterion.

- In October 2000, a Technical Committee Meeting was held, as a follow-up to the June 2000 consultant's meeting. Both NRC and EPA staff participated in this meeting. IAEA is scheduling meetings to develop a safety guide on clearance levels.
- The EU has established a clearance criterion of 10 μ Sv per annum. The last of a series of clearance guidance documents is being finalized.

4b. EPA/DOS activities

- EPA participated in the fall 1999 public meetings on the Issues Paper and as one of the stakeholders at the May 9, 2000, Commission meeting. Previously, NRC and EPA staff have coordinated efforts on development of technical information bases on scenarios and pathways related to potential exposures.
- EPA staff recently stated that EPA is tabling clearance rulemaking activities and refocusing on the interception of imports with sufficient radioactive content to warrant regulatory control. EPA has not yet defined what is meant by "sufficient radioactive content."
- The International Radioactive Source Management (IRSM) initiative, supported by DOS, has been inactive.

4c. Department of Energy (DOE) activities

- DOE participated at the fall 1999 public meetings on the Issues Paper and also participated as one of the stakeholders at the May 9, 2000, Commission meeting.
- In October 2000, DOE published in the FRN, and posted on their website, for public comment, a revision of an internal standard of no detectability for release of materials. Comments on the DOE standard were prepared by the staff and forwarded to the EDO the week of November 13-17 for Commission review. Following Commission review, NRC comments were sent to DOE on December 4, 2000. The NRC position noted in the letter is that a detectability-based standard is inconsistent with a risk-informed approach.

4d. Evaluation of case-specific situations

- On August 7, 2000, the staff issued internal guidance on handling case-specific licensing decisions on release of solid materials from licensed facilities during the period that the NAS study is in progress. This guidance was forwarded to the Agreement States on August 22, 2000. The guidance states that requests for release of solid materials will be handled on a case-by-case basis using existing guidance, i.e., Regulatory Guide 1.86 and its equivalent, Fuel Cycle Policy and Guidance Directive FC 83-23, for materials licensees and Office of Inspection and Enforcement Circular 81-07 and Information Notices 85-92 and 88-22 for reactor facilities.