UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SECRETARY

June 1, 2005

COMMISSION VOTING RECORD

DECISION ITEM: SECY-05-0054

TITLE: PROPOSED RULE: RADIOLOGICAL CRITERIA FOR CONTROLLING THE DISPOSITION OF SOLID MATERIALS (RIN 3150-AH18)

The Commission (with all Commissioners agreeing) disapproved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of June 1, 2005.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

Annette L. Vietti-Cook
Secretary of the Commission

Attachments:
1. Voting Summary
2. Commissioner Vote Sheets

cc: Chairman Diaz
Commissioner McGaffigan
Commissioner Merrifield
Commissioner Jaczko
Commissioner Lyons
OGC
EDO
PDR

VOTING SUMMARY - SECY-05-0054

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. DIAZ		X			X	5/11/05
COMR. McGAFFIGAN		X			X	5/5/05
COMR. MERRIFIELD		X			X	5/6/05
COMR. JACZKO		X			X	5/18/05
COMR. LYONS		X			X	5/5/05

COMMENT RESOLUTION

In their vote sheets, all Commissioners disapproved the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on June 1, 2005.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: CHAIRMAN DIAZ

SUBJECT: **SECY-05-0054 - PROPOSED RULE: RADIOLOGICAL CRITERIA FOR CONTROLLING THE DISPOSITION OF SOLID MATERIALS (RIN 3150-AH18)**

Approved _____ Disapproved __xx__ w/comments Abstain _____

Not Participating _____

COMMENTS:

See attached comments.

SIGNATURE

May 11, 05
DATE

Entered on "STARS" Yes ✓ No ___

COMMENTS OF CHAIRMAN DIAZ ON SECY-05-0054

I want to commend the staff for providing the Commission with an excellent rulemaking package. The proposed rule is responsive to Commission direction in SRM-02-0133 and provides a comprehensive, thorough, well thought out, and technically sound assessment of the issues and alternatives. The decision making process for the proposed rule was open and reflects extensive stakeholder input from citizens and environmental groups, metals and concrete industry, nuclear industry representatives, and other State and Federal Agency's representing a broad-based and diverse set of views. I assure you that I recognize and truly appreciate the amount of hard work, dedication, and time commitment the staff has put forth in the conduct of this enhanced participatory rulemaking and production of the resulting high quality proposed rule and supporting documents.

The issues related to the release of slightly radioactive solid materials have been extensively debated in the United States for over 20 years. There is a very significant body of information from the debates, covering every possible aspect of the issue. The agency has expended significant resources on multiple public workshops and public meetings to obtain a range of stakeholders' views. In addition, we also contracted with the National Academies' National Research Council to provide a report on alternatives for control of solids, and with several other contractors to develop the required technical information base to support decision-making. As a result, we have the technical information base necessary to provide a solid foundation for this policy decision. The 1 mrem/yr (.01 mSv/yr) dose criterion is based on scientific analysis and regulatory considerations and is a generic constraint well below levels established to ensure protection of public health and safety. Material released at this level would be a very small fraction (1/100) of NRC's public dose limit in 10 CFR Part 20; in the range of, but less than, other standards, e.g., Part 50 effluent requirements and EPA drinking water standards in 40 CFR Part 141; comports with the technical findings in reports prepared by various recognized scientific organizations with regard to its very small potential risk; and represents a minute fraction of natural background. The history of this endeavor shows that all due care and consideration has been given to this issue. Inconsistent application of **de facto** standards should not continue to be part of our regulatory framework. The American people deserve better.

That being said, however, I believe that we should defer publication of the proposed rule at this time. The key issue in making this difficult decision is the fact that the Agency is currently faced with several high priority and complex tasks upon which the Commission needs to focus. Although I believe strengthening our regulatory framework in this area is the right thing to do, I believe that publication of the rule at this time will serve as a distraction from these higher priority tasks. Given that NAS has concluded that the current approach "is sufficiently protective of public health and safety", I believe no immediate action is necessary. I do, however, believe that the staff has provided the technical information base necessary to provide a solid foundation for this policy decision, and that the staff should re-submit the proposed rule at the end of calender year 2007.

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER MCGAFFIGAN

SUBJECT: **SECY-05-0054 - PROPOSED RULE: RADIOLOGICAL CRITERIA FOR CONTROLLING THE DISPOSITION OF SOLID MATERIALS (RIN 3150-AH18)**

Approved _____ Disapproved X w/comments Abstain _____

Not Participating _____

COMMENTS:

See attached comments.

Edward McGaffigan Jr.
SIGNATURE

May 5, 2005
DATE

Entered on "STARS" Yes X No ___

Commissioner McGaffigan's Comments on SECY-05-0054

Over the years I have started several of my votes by stating my appreciation to the staff for doing a great job on a difficult task. In this particular case I do not feel that the words "appreciate", "great" or "difficult" are anywhere near sufficient.

The staff has worked tirelessly on this rulemaking since 1999. The staff has developed this rulemaking and accompanying draft generic environmental impact statement in an extremely open process. The staff has also conducted numerous workshops and public meetings to ensure the Commission has all the information from stakeholders required to make an informed decision on issuing this rulemaking for formal comment. However, I do not believe that we should proceed with this rule at this time.

My vote is based on three primary factors. First, we have higher priorities for our limited rulemaking resources, particularly in the security area, that we had not fully anticipated in 2002. Second, other Federal agencies who would need to move in parallel with us, particularly EPA, have higher current priorities as well. Third, this rulemaking is not needed now and likely will not be needed for many years. Our current case-by-case decision making processes are adequate for our prospective workload.

With the resources required to issue this rulemaking and resolve comments, we could complete several security rulemakings. Moreover, I am concerned that the resources currently budgeted to complete this activity were underestimated. This effort would continue to consume a great deal of resources for several years to come. There are many much higher priority activities that the NRC should complete in those same years. Materials security rulemakings for a wide range of licensees deserve priority (i.e., category I facilities, category III facilities, enrichment facilities, spent fuel transportation, independent spent fuel storage facilities, geologic repository operations area, transportation of large quantities of radioactive material, large irradiators, etc). There are additional materials security rulemakings, for example, on access authorization that are not budgeted at all today because our legislative program has not been enacted. I fully agree with the staff that we have taken rigorous actions to enhance security through a series of security orders and security advisories in these areas since 2002, but rulemakings are needed to bring stability to our regulatory framework going forward.

I believe this rule package would serve as a good starting point on which to proceed, should a majority of the Commission decide to do so now or sometime in the future, but I do not support the staff's preferred option. As I stated in my vote on SECY-02-0133, I believe this rulemaking should provide for the unrestricted release of material less than 10 μSv/yr (1 mrem/yr), consistent with IAEA guidance and largely consistent with ANSI -1312, currently being updated. The National Technology Transfer Act of 1996 strongly encourages agencies to use voluntary consensus standards where available.

This approach (the "unrestricted release alternative" in the Generic Environmental Impact Statement) would continue to be fully protective of public health and safety. The National Academy of Sciences' report stated "An individual dose standard of 10 μSv/yr (1 mrem/yr) provides a reasonable starting point for the process of considering options for a dose-based standard for clearance..." It supported this finding for several reasons one of which was that "A dose of 10 μSv/yr (1 mrem/yr) is significantly less than the amount of radiation that we receive from our own body due to radioactive potassium...", which is approximately 40 mrem/yr.

We live in a radioactive universe. We are radioactive ourselves. People who work in the Capitol and the Library of Congress receive doses ranging from 50 to 100 mrem/yr from the granite in the buildings. Anyone worried about receiving 1 mrem/yr should avoid all airline travel (one US round trip flight ≈5 mrem), should avoid brick houses (living in a stone, brick or masonry house ≈7 mrem/yr), should avoid double beds (sleeping for 8 hours next to another person ≈2 mrem/yr) and should never smoke (average dose from smoking ≈1300 mrem/yr), and I could go on and on. They should mitigate radon in their homes (potentially hundreds of mrem/yr), avoid granite counter tops, glazed ceramic tiles, living at high altitude, Fiestaware, Brazil nuts, etc. I advocate none of these actions, except mitigating radon and not smoking. All regulatory agencies need to decide where best to allocate their limited resources. It should not be controversial that the equivalent of sleeping in double beds need not consume regulatory resources.

Our colleagues at EPA have higher priorities as well, including revising the standard for the proposed Yucca Mountain repository, revising the Eisenhower - Kennedy era Presidential guidance on public dose, and updating their 1992 Manual of Protective Action Guides for Nuclear Incidents, three very resource intensive efforts. I fully understand why they would be hard pressed to add a fourth complicated rulemaking effort at this time.

There is relatively little decommissioning going on now that would make this rule necessary. Due to the recent increase in reactor facility license renewals, the number of expected decommissioning reactors has markedly decreased. The few that are currently in decommissioning can easily be handled in our current case-be-case process. This is supported by the National Academy of Sciences study which found "The current approach to clearance decisions is workable and is sufficiently protective of public health that it does not need immediate revamping." The Academy also found "If most of the licensees of currently operating reactors obtain 20-year license extensions, relatively little SRSM [slightly radioactive solid material] will arise from power plant decommissioning during the 2006-2030 period." Almost half the current fleet has either already received a renewal license (30 units) or has an application before NRC (19 units). The vast majority of the rest plan to follow suit.

In conclusion, I want to make it exceedingly clear that I am not disapproving the proposed rule because I think it is the wrong thing to do. Nor am I disapproving it because of pressure from certain interest groups. In previous votes on this matter I have expressed regret at the demagoguery engaged in by interest groups who willfully sow misinformation and distortions about every NRC effort (and indeed every effort of other Federal and State agencies, international institutions and standard setting bodies) to try to define the boundary for unrestricted use material.

So, given that there is little decommissioning going on right now, that our current case-by-case practices work, and that we are having to make hard choices on how to utilize our limited resources, I have to defer this rulemaking effort. I cannot spend valuable resources on a rule that is not needed for a number of years when there are important security rules that need to be our focus the next few years.

EMG

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER MERRIFIELD

SUBJECT: **SECY-05-0054 - PROPOSED RULE: RADIOLOGICAL CRITERIA FOR CONTROLLING THE DISPOSITION OF SOLID MATERIALS (RIN 3150-AH18)**

Approved _____ Disapproved X Abstain _____

Not Participating _____

COMMENTS:
See attached comments.

John D. Thoma for
Jeffrey S. Merrifield
SIGNATURE

05/06/05
DATE

Entered on "STARS" Yes ✓ No ___

Comments from Commissioner Merrifield on SECY-05-0054:

Over the course of the almost seven years I have served on this Commission, I and my fellow Commissioners have taken the view that we ought to actively strive to fix programs, processes and procedures that we believed were broken. Overall, this effort has served us well, and I am pleased to say that the portion of the nuclear arena that we regulate is safer and more efficient than it was when I started.

For me, decommissioning has been one of the areas that I have spent some considerable time on, particularly because of the long-standing work I had accomplished in this area well before I joined the Commission. From the standpoint of bringing reactor and material site decommissioning activities to a closure, I am very proud of the significant progress that our staff and our licensees have accomplished. Nonetheless, despite this progress, one issue that has troubled me for a long time is the difficulty of identifying appropriate locations for the disposal of low-activity waste, and the lack of a simple process to determine whether to recycle or dispose of waste materials.

From the standpoint of science, I believe that the appropriate standard for the unrestricted release of materials into the marketplace for recycling is 1 millirem. This is the standard that has been found acceptable by our counterparts in the European Union, and one that has been widely accepted by other members of the International Atomic Energy Agency.

But, this is not just a simple matter of science.

Recognizing the importance that our stakeholders place on this issue, I spent a fair amount of time traveling and speaking to a wide variety of individuals who were interested in this issue. As a result of these efforts, I felt that we needed to be a bit more creative in our approach to a complicated public policy issue.

In direct response to the direction of the Commission, in which I was in full accord, our staff engaged on a series of very difficult stakeholder meetings to attempt to seek common ground and identify sound public policy. Following the full intent of the Commission, the staff worked tirelessly to prepare a proposed rule that would amend the NRC regulations to establish new standards for these materials. What resulted is the proposed rule we currently have under consideration which would provide limited, albeit somewhat complicated, disposition pathways for these materials. In my view, what the staff delivered was exactly what the Commission asked for. The staff deserves high commendation for their effort.

In the meantime, the National Academy of Sciences (NAS) conducted its own analysis of how the NRC was overseeing the disposition of these materials. What they found was quite simple: the current program is working just fine. Not only did they find that the existing Commission procedures provide adequate protection for public health and safety, but there is no driving force requiring immediate action.

One other thing has changed. When I started here seven years ago, we were still uncertain whether there would be a bow wave of reactors shutting down. Today this situation is quite different. We face a bow wave of new reactor orders.

Instead of figuring how to shed workers (which we were doing in 1998), we now are scrambling to have a sufficient number of staff to accomplish the work we have before us.

We no longer have the luxury of fixing things because we may have identified a procedure that is more efficient. For cost and workforce reasons, I must concur with the NAS that there is not a driving force requiring immediate action to move forward with this proposed rule. At a time when we have other safety and security priorities demanding our attention, I cannot justify the time and expense needed to bring this effort to a conclusion at this time. Therefore, I must reluctantly cast a vote to disapprove this paper.

On a final note, I believe that the staff has done a good job casting this issue for a future Commission. Whether it is two, five or ten years down the road, I think a future Commission will have two very good options for its consideration; the proposed rule encompassed by this paper, and a 1 millirem unrestricted release program.

Again, I appreciate the tireless work of our dedicated staff.

John O. Thoma for
Jeffrey S. Merrifield
05/06/05

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER JACZKO

SUBJECT: **SECY-05-0054 - PROPOSED RULE: RADIOLOGICAL CRITERIA FOR CONTROLLING THE DISPOSITION OF SOLID MATERIALS (RIN 3150-AH18)**

Approved _____ Disapproved _x_ Abstain _____

Not Participating _____

COMMENTS: See attached comments

SIGNATURE

5/16/05

DATE

Entered on "STARS" Yes ___ No ___

COMMISSIONER JACZKO'S VOTE ON SECY-05-0054
PROPOSED RULE: RADIOLOGICAL CRITERIA FOR CONTROLLING THE DISPOSITION OF SOLID MATERIALS

I disapprove of the proposed rule on the disposition of solid materials. The rule represents a reasonable attempt to balance the interests of stakeholders who oppose the release of material and stakeholders who support the free release of materials, by designating alternative disposal pathways for slightly contaminated materials. As currently written, however, the rule provides limited or no assurances that the alternative pathways would be properly utilized.

I am concerned, however, that the Commission does not have a rigorous regulatory framework to deal with the disposition of slightly contaminated material. Although the National Academy of Sciences indicated that "the current approach to clearance decisions is workable and is sufficiently protective of public health that it does not need immediate revamping, " the current practice for reviewing the release of solid materials from licensees is neither transparent nor health and safety-based. I believe the nation would benefit from an appropriate dose-based and transparent process for dealing with slightly contaminated solid materials.

5/18/05

NOTATION VOTE

RESPONSE SHEET

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER LYONS

SUBJECT: **SECY-05-0054 - PROPOSED RULE: RADIOLOGICAL CRITERIA FOR CONTROLLING THE DISPOSITION OF SOLID MATERIALS (RIN 3150-AH18)**

Approved _____ Disapproved __x__ w/comments Abstain _____

Not Participating _____

COMMENTS:

See attached comments.

JMP for Cmr. Lyons 5/5/05

SIGNATURE

5/ /05

DATE

Entered on "STARS" Yes x No ___

Commissioner Lyons' Vote on SECY-05-0054
Proposed Rule: Radiological Criteria for Controlling the Disposition of Solid Materials

Disapprove with comments

I appreciate the efforts of staff to develop a draft rule consistent with the previous Commission guidance in the SRM on SECY 02-0133. However, I cannot support the proposed rule for the following reasons:

1) A radiation dose level below 1 millirem per year is protective of public health and safety. It is so far below natural background levels, and so far below even local variations in natural background levels, that there is no risk from release of materials contributing such a dose. The drafted rule, releasing materials with dose levels below one 1 millirem per year only into specific applications, is unnecessarily complicated. It does not reflect the scientific fact that these materials can be safely released for all applications. By allowing only specific uses, there is an implication that the material is not really safe for complete release - that implication is not consistent with the scientific facts.

2) Release only for specific applications will lead to unnecessary debate about the precise application intended, and will complicate further reuse of any such materials. It would not be possible to assure that subsequent reuse of any of these materials remains within the "allowed" usages. Nor should we imply that such control is necessary, when the material is adequately safe for full release in the first place.

3) Much of the international community has recognized the scientific reality of safe release of materials with radiation levels below 1 millirem per year. We risk completely artificial and unnecessary complications with international commerce if we approve a rule that differs from the international norm.

4) The current approach of the Commission, requiring careful evaluation of specific cases, is adequately protective of public health and safety.

In the future, it would be desirable to move towards a dose-based general release regulation to avoid the need for re-evaluation of each specific case, but I am not persuaded that this issue has sufficient urgency to recommend that we proceed immediately to redraft the regulation. Given the range of challenges facing the Commission and burdening the staff, I believe that staff resources can be better invested in other projects for the foreseeable future.

Peter B. Lyons 5/ /05

J.M.B. for Cmr. Lyons 5/5/'05