

POLICY ISSUE NOTATION VOTE

July 15, 2002

SECY-02-0133

FOR: The Commissioners

FROM: William D. Travers
Executive Director for Operations

SUBJECT: CONTROL OF SOLID MATERIALS: OPTIONS AND
RECOMMENDATIONS FOR PROCEEDING

PURPOSE:

To inform the Commission of (1) results of a study by the National Academies' National Research Council (hereafter, NA) on alternatives for control of solid materials, (2) staff activities related to other factors that can affect decision-making on this issue, and (3) options and recommendations for proceeding.

SUMMARY:

The Commission has been examining its approach for control of solid materials and, in June 1999, requested public comment on an Issues Paper on this subject. In Staff Requirements Memorandum (SRM) dated August 18, 2000, the Commission decided to defer a decision on rulemaking in this area and request that the NA conduct a study on alternatives for control of solid materials. This paper provides the Commission with information about findings and recommendations of the NA in their final report, and also provides NRC staff analyses of alternatives for proceeding, including a recommended approach.

BACKGROUND:

On June 30, 1999 (64 FR 35090), the Nuclear Regulatory Commission (NRC) published, in the Federal Register, for public comment, an Issues Paper indicating that NRC was examining its

CONTACTS: Frank Cardile, NMSS/IMNS
(301) 415-6185

Anthony Huffert, NMSS/DWM
(301) 415-6416

approach for control of solid material. To provide further opportunity for public input, NRC held a series of public meetings during the fall of 1999.

On March 23, 2000, the NRC staff provided the Commission with a paper (SECY-00-0070) on the diversity of views expressed in public comments received on the Issues Paper. The staff also provided the status of its technical analyses and noted the related actions of international and national organizations and agencies. Based on these various factors, the staff recommended that a final decision on whether to proceed with rulemaking be deferred and that the NA be requested to conduct a study of alternatives for control of solid materials. SECY-00-0070 also recommended that, while the NA study was ongoing, the staff continue to develop a technical information base for decision-making and stay informed of international and U.S. agency activities in this area. On August 18, 2000, the Commission approved the staff's recommendations in SECY-00-0070 and directed the staff to provide the Commission with its recommendations on how best to proceed, as well as the status of the technical bases, approximately 3 months after completion of the NA study. The Commission also directed the staff to provide Quarterly Reports to the Commission on progress made on pertinent issues, while the NA study was underway; Quarterly Reports were sent to the Commission in December 2000, March, July, and September 2001, and January and April 2002, and can be found on NRC's website at: <http://www.nrc.gov/materials.html>.

DISCUSSION:

Based on the NA report and on other factors affecting decision-making, the staff has developed a set of options for proceeding with a regulatory process for examining alternatives for control of solid materials. The NRC staff's review of the NA report and a summary of the NA report are contained in Attachments 1 and 2, respectively. Other factors considered in development of the options include the status of NRC's technical information base and a review of related activities by national and international organizations; these are described in Attachments 3 and 4, respectively.

Summary of the NA's Study

On August 31, 2000, a contract was awarded for the NA to conduct a study of, and provide recommendations on, possible alternatives for control of solid materials. The contract called for the NA to consider: existing technical bases; national and international policies and approaches; guidelines from standards-setting organizations; and public concerns. The contract specified that the NA should provide recommendations on whether NRC should: continue the current system of case-by-case decisions and, if so, whether, and how, the current system should be revised; establish a national standard by rulemaking and, if so, provide the approach to be used, the basis for release criteria, and the basis for establishing a numerical limit or, if appropriate, propose a numerical limit; or consider another alternative approach. The contract also noted that the NA should provide recommendations on how stakeholder concerns can be integrated into an acceptable approach and also how NRC might consider international standards in its efforts.

On March 21, 2002, the NA submitted its final report to the NRC, containing two overarching findings, seven recommendations, and 31 specific findings. Overarching finding 1 (OA1) notes that NRC's current approach is workable and is sufficiently protective of public health that it does not need immediate revamping. However, OA1 also notes that the current approach is incomplete, has inconsistencies, and lacks a risk basis and that, therefore, NRC should move ahead, without delay, with a process to evaluate alternatives for control of solid material.

Overarching Finding 2 (OA2) notes that broad stakeholder involvement and participation in NRC's decision-making process is critical. OA2 notes that the likelihood of acceptance of an NRC decision increases greatly if the process engages all responsible viewpoints, is perceived as fair and open, and evaluates a broad range of alternatives in an even-handed way.

The seven recommendations focus on this process rather than recommending a specific approach for handling solid material. In particular, Recommendations 1, 2, and 3 (R1, R2, R3) stress the need for, and methods for, building public confidence and involving stakeholders in this effort. The report notes that NRC has a difficult task in this area as a result of issues from prior NRC activities in related areas, as well as stakeholder concerns specific to this effort. The NA report does not contain a detailed recommendation for a specific technical approach for controlling solid materials, because it indicates that it does not want to prescribe the outcome of the decision process. Although a specific technical approach isn't provided, the NA report provides broad information on: impacts and benefits that need to be considered (R1) (including the possible use of an alternative which would restrict future uses of solid material to certain authorized uses (the NA report refers to this alternative as "conditional clearance")); the nature of a standard (R4); a criterion that could be a "starting point" for discussions (R5); and the need to assess international efforts in this area (R7). R6 notes that NRC should use the conceptual framework of its technical bases developed to date, but that it should have more complete analyses available for use in the decision-making processes recommended by R1 and R2.

An outline summary of the final report, including the NA's findings, recommendations, and supporting rationale, is presented in Attachment 2.

Staff Review of the NA's Study

In its review of the NA's study and recommendations, the NRC staff used as its basis NRC's Strategic Plan, NUREG-1614. As noted in the Strategic Plan, NRC's overall goal is to "...conduct an effective regulatory program that allows our Nation to use nuclear materials safely for civilian purposes and in a manner that protects the public and the environment." To accomplish this goal, the Strategic Plan lists four performance goals, which are: 1) maintain safety, protection of the environment, and the common defense and security; 2) increase public confidence; 3) make NRC's activities and decisions more effective, efficient, and realistic; and 4) reduce unnecessary regulatory burden on stakeholders, both licensees and other affected industries.

The staff's review of the NA report is contained in Attachment 1. The following is a brief discussion of the staff's review.

In general, the NRC staff agrees with a number of the NA's recommendations including: R1, on the need to study all alternatives, factors, and associated impacts; R2, on the need to integrate meaningful stakeholder input into the decision-making process; R3, on the need to have an overarching decision framework to govern our evaluation of this issue; and R7, on the need for consistency with, and cognizance of, international approaches. The staff finds these recommendations broadly consistent with existing Commission policies and the four performance goals, as well as with previous NRC documents, such as the Issues Paper, and with its current effort to develop technical bases in this area. If a rulemaking is conducted, the staff also agrees with R4, on considering use of a risk-informed dose standard, and R5, on the use of 10 $\mu\text{Sv}/\text{yr}$ (1 mrem/yr) as a "starting" point in assessing alternatives, although, in any rulemaking process, this alternative would be only one amongst several evaluated.

However, the staff questions, or does not completely agree with, other aspects of the NA recommendations. With regard to the findings supporting R1, the report does not provide sufficient supporting information as to whether the alternatives it suggests, e.g., restricted use, are workable or practical. With regard to R2 and R3, the staff notes that, despite previous NRC efforts to engage stakeholders on the Issues Paper, the NA findings indicate that there is significant distrust and lack of confidence in NRC and that obtaining it will be a difficult process.

Thus, R2 and R3 recommend a fairly prescriptive list of actions. However, the NA report did not address the expending of a potentially large amount of resources to take these actions for an issue which OA1 and R5 indicate has very low associated radiological risk at the levels being considered. Therefore, the NRC staff, in developing options for proceeding, has focused on how best to make use of NRC's limited resources in a manner that achieves the performance goals of maintaining health and safety, improving public confidence, increasing efficiency and effectiveness, and reducing unnecessary regulatory burden on stakeholders.

With regard to R5, which discusses the basis for a dose standard, the staff notes that the report has not provided detailed scientific bases to facilitate the understanding of risk management issues or to resolve disagreements amongst stakeholders in this area. In R6, related to the NA review of NRC's draft report, "Radiological Assessments for Clearance of Equipment and Materials from Nuclear Facilities," NUREG-1640, the NA report generally complimented NUREG-1640 regarding its rigor, traceability, and risk analysis. However, R6 was also critical of certain perceived shortcomings in NUREG-1640. It appears to the staff that these criticisms stem from a misunderstanding in the NA report that all technical work is being conducted as part of the NUREG-1640 document. While the staff agrees that its assessment should include evaluation of a broad range of alternatives, including their impacts and costs, NUREG-1640 was not designed to be a comprehensive report covering all necessary technical work. In actuality, NUREG-1640 is limited in scope to developing information on individual dose factors and was not intended to form the entire technical basis for assessing impacts and other factors necessary to support decision-making. Previously published NRC documents, such as the Issues Paper and Attachment 1 of SECY-00-0070, describe the additional analyses that are needed in a technical information base to support decision-making; these analyses are either underway or being considered in various NRC-sponsored studies.

Status of Technical Basis Development

Consistent with the August 18, 2000, SRM, the staff has proceeded with development of a technical information base to support decision-making. The principal elements of the information base and their status are summarized here and discussed in detail in Attachment 3.

The intent of NRC's effort to develop technical bases is to provide a means to assess a broad range of alternative approaches for control of solid material, including impacts on human health, on the environment, and on industries, both licensees and others. A first step in this effort is developing the ability to estimate the dose an individual might receive as a result of implementing the different alternatives. To accomplish this first step, NUREG-1640, which analyzed metals and concrete, was issued for public comment in March 1999 and will be published as a final report in December 2002, to incorporate public comments. As follow-ons, a draft study analyzing soil is planned for issuance in October 2002, and an analysis of other materials is planned as Supplement 1 to NUREG-1640 in June 2003. Further analyses assessing the potential for exposure to multiple sources as well as collective doses are due in December 2002 and June 2003, respectively. Supporting these analyses is a report on the inventory of solid material at licensed facilities scheduled for issuance as a draft NUREG in

July 2002. An effort to assess capabilities to conduct radiation surveys of solid materials at levels near background is planned for issuance as a draft NUREG for public comment in July 2002.

Other Factors Affecting Decision-Making

Consistent with the August 18, 2000, SRM, the staff has maintained cognizance of and, as appropriate, provided input to, various other activities and initiatives by international and national organizations and agencies. A detailed discussion of these other factors is provided in Attachment 4. Specifically, the relationships of these initiatives to NRC efforts are presented in Section E of Attachment 4. Some of these initiatives are summarized here.

With regard to international activities, there is an interrelationship between actions being taken internationally and within the U.S. International agencies, like the International Atomic Energy Agency and the European Commission, as well as individual nations, are in the process of establishing standards for clearance of material. Inconsistency in standards between the U.S. and other nations has resulted in confusion regarding international trade, in particular if materials released under other nations' regulations arrive as imports in the U.S.

With regard to U.S. agency activities, the U.S. Environmental Protection Agency (EPA) has responsibility for setting generally applicable environmental standards under the Atomic Energy Act. However, it does not currently have a program to set standards on control of solid materials in the U.S. Instead, EPA has been focusing its activities on orphan source issues as well as on the interception of imports with sufficient radioactive content to warrant regulatory control, and has set up pilot programs with the U.S. Department of State for monitoring imports. Other federal agencies, including the U.S. Department of Energy (DOE), have engaged in monitoring U.S. borders and other locations for radiological threats in response to terrorist activities. The DOE has a large inventory of stored solid material having low amounts of radioactivity from its various defense activities and has had, since calendar year 2000, a moratorium on release of volumetrically contaminated metals and on release of scrap metal for recycling. During 2001, DOE conducted a scoping process for issuance of a Programmatic Environmental Impact Statement (PEIS) on alternatives for disposal of DOE scrap metals. Currently, DOE plans to issue the PEIS for public comment later this year.

Agreement States have regulatory responsibilities under their agreements with the NRC for control of solid materials for licensees in their States. These States and the non-Agreement States, through the Conference of Radiation Control Program Directors, recently approved a resolution recommending that NRC move forward with a rulemaking process for developing national standards for the control of solid materials from nuclear facilities, that the standards include a prohibition against import of solid materials exceeding the U.S. standard, and that the technical bases developed by NRC include considerations of naturally-occurring and accelerator-produced and technically enhanced naturally-occurring radioactive material.

With regard to other organizations, the American National Standards Institute published a report (N13.12-1999) containing criteria for unrestricted release of solid materials. Under the National Technology Transfer and Advancement Act of 1995, Federal agencies are to use this type of technical standard, unless its use is inconsistent with applicable law or otherwise impractical. Another organization, the National Council on Radiation Protection and Measurements (NCRP), is preparing a report with recommendations on alternatives for disposition and possible recycling of solid material.

NRC Staff List of Options for Proceeding

Based on the NA's report and considering other related factors, the staff has developed various options for proceeding. As noted above, the NA report recommends a coordinated decision-making process for moving forward, rather than recommending a specific technical approach for control of solid material. Thus, the staff's options and recommendations also focus on the process for making decisions on a workable technical approach.

Option 1 - Take no action on a process. The rationale for Option 1 includes OA1 which states that the current approach is sufficiently protective of public health and does not need immediate revamping, although it has certain shortcomings. However, Option 1 would not begin a broad process, as suggested by OA2, to correct shortcomings in the current approach because NRC is currently involved with other higher-priority safety issues. The rationale for Option 1 also includes existing provisions in NRC's regulatory structure (e.g., 10 CFR 20.2002, "Method for obtaining approval of proposed disposal procedures") for restricted use, which was suggested by the NA report as a potentially acceptable approach. Option 1 could take one of the following forms:

Option 1a - Take no action on a process; maintain status quo. In this option, NRC would not conduct a rulemaking, or other broad process, at this time. NRC would continue to use its current approach and practices, as described in the Issues Paper and in an All-Agreement States letter (STP-01-081), dated November 28, 2001, and as noted above regarding restricted use.

Option 1b - Take no action on a process; modify current approach to harmonize gaps. In this option, NRC would modify its current approach to harmonize some of the gaps noted in the NA report. This could include resolving differences between NRR and NMSS on the current approach for solid material, providing added guidance on use of 10 CFR 20.2002, and/or considering appropriate means for review of specific licensee requests. Option 1b would not significantly alter the current approach from that evaluated by the NA, but would harmonize and improve its consistency. Option 1b could involve modifying staff review practices, preparing an information notice, or be part of a consolidated guidance effort. Documents describing the harmonized approach could be issued for public comment.

Option 2 - Defer a process - instead, engage stakeholders on the NA report and review related activities. The rationale for Option 2 includes OA1, which states that the current approach is sufficiently protective of public health and does not need immediate revamping. Therefore, before moving forward, Option 2 would seek broader stakeholder input in review of the NA report and also allow for staff review of other related actions underway at this time, as discussed below. Option 2 could involve use of the NA report as a discussion tool for written public comment and/or at 1 to 2 workshops focused on the report's findings and recommendations, and on NRC's next steps. The staff could report to the Commission on the comments received. Because Option 2 would defer rulemaking or other broad process, Option 2 might include, as an interim measure, some modification of the current approach for controlling solid materials, as suggested by Option 1b.

As part of this effort, the NRC staff could also follow a number of related efforts, discussed in some detail in Attachments 3 and 4, to determine their possible impact on this issue. These include the additional NRC analyses (described above and in Attachment 3) being conducted during FY2002/2003. In addition, there are certain international efforts being conducted, and nearing completion, at this time. Also, the results and experience gained from completion of DOE's PEIS and completion of the NCRP report on disposition of solid material may provide

additional insight as to stakeholder views on certain aspects of the different approaches for control of solid material.

Option 3 - Conduct a process, either a rulemaking or a broad NA-like process, at this time. The rationale for this option is that it could incorporate the OA2 suggestion for a process engaging stakeholders and/or the Administrative Procedures Act (APA) and National Environmental Policy Act (NEPA) processes by which NRC decisions are generally made. Also, it can build on efforts expended by NRC and stakeholders in preparing and providing both written and oral comment on the Issues Paper. Option 3 could take one of the forms noted here.

Option 3a - Begin a broad, deliberative process as suggested by NA. This option could involve discussion of broad policy issues, as well as more focused ones in a manner in keeping with OA2 and R1, R2, and R3. Option 3a is similar to Option 2, but would involve specifically starting a process, as suggested by the NA report, whereas Option 2 would take a more preliminary stance of continuing the review of the NA report. Option 3a could consist of a deliberative approach addressing both broad and focused issues in a series of workshops and/or advisory board review. The timing of the process would be based on the issues to be discussed, as well as the time for preparation, and stakeholder review, of a discussion document. The discussion document suggested by R3 is an overarching policy statement similar to the International Atomic Energy Agency's Safety Series 89, "Principles for the Exemption of Radiation Sources and Practices from Regulatory Control." The discussion document used by the staff under Option 3a could be a policy statement or a supplemental issues paper. In keeping with the recommendations and findings of the NA report, Option 3a would be conducted in a manner to allow sufficient time for stakeholder review of the discussion document, as well as the supporting technical basis documents. The Option 3a process would be input to NRC decision-making on proceeding. Option 3a could also include some modification of the current approach for controlling solid material as an interim measure.

Option 3b - Proceed with rulemaking. Under this option, an enhanced participatory rulemaking process (such as that used for the license termination rulemaking (LTR) proposed rule, using APA and NEPA processes and a workshop format) could be used to accomplish the objectives of OA2 and R1, R2, and R3. The NA report cited the LTR proposed rule process as an example of a success, but it would be important to maintain consistent opportunity for stakeholder input throughout a rulemaking process. The document used for discussion and for soliciting stakeholder input could be an Advance Notice of Proposed Rulemaking (ANPR). This process would represent a deliberate, but still focused, rulemaking effort to evaluate a broad range of alternatives as suggested in the NA report. Similarly to Option 3a noted above, Option 3b would be conducted in a manner to allow sufficient time for stakeholder review of the discussion document, as well as the supporting technical basis documents.

An alternative approach under Option 3b could be use of a more direct rulemaking process that begins with preparation of a rulemaking plan and a proposed rule. Public comment would be requested on the proposed rule, but a workshop process to solicit further input would not necessarily occur, or be less extensive, and this option would proceed in a more traditional manner.

Option 3c - Conduct a rulemaking focused on a narrow area. Under this option, a rulemaking could be conducted which is focused on developing a workable solution in a narrow area. This could involve, for example, developing a standard for only certain material(s), such as concrete or routine trash-type material. The overall process could be similar to Option 3b, however the nature of the meetings and discussions could be

more focused on the material being considered and specific solutions to issues surrounding the material.

Advantages and Disadvantages of Options

In evaluating Options 1, 2, and 3, it should be noted that any of the process options, if properly carried out, would maintain health and safety. Thus the evaluation of options centers on how best to use NRC's limited resources to achieve the goals of increasing public confidence, increasing efficiency and effectiveness, and reducing unnecessary regulatory burden on stakeholders. As noted in the NA report, it is important, whichever of these options is used, that there be clarity regarding the nature of decision-making and the role that all stakeholders can play.

Advantages of Option 1a include that the current approach is workable and familiar, that decommissionings on a large scale are not expected until 2020, and that no resources for rulemaking would be committed. However, disadvantages of Option 1a include its lack of an overall risk basis or consistent approach, use of outdated measurement bases, and international consistency issues. In particular, there is not regulatory finality associated with Option 1a because there is not a regulation as the basis for the guidance in the current approach. Also, although the current approach has been in general use for some time, licensees have indicated problems with its use in dealing with materials they handle day-to-day, and the NRC staff has had to expend resources on case-specific reviews as well as in explaining the risk basis of the current approach to stakeholders and in responding to Congressional inquiries. In addition, it is anticipated that staff resources necessary to review activities on a case-by-case basis may increase due to expanded use of radiation monitors for detecting solid materials with small amounts of radioactivity outside NRC-licensed facilities.

An advantage of Option 1b is that some of the inconsistencies and gaps noted above, and in the NA report, could be addressed and that specific licensing actions could therefore be completed more effectively and efficiently. Also, under Option 1b, fewer resources would be used than in a major rulemaking, although this option could involve considerable staff resources in preparing guidance documents. Disadvantages associated with Option 1b include that it could raise legal issues as to the extent that a modified current approach, based on guidance without a corresponding regulation, can be implemented in a consistent manner, as it may not be binding or enforceable. In addition, some of the same issues that exist for Option 1a may remain (e.g., overall lack of risk basis, international consistency, the need for case-specific reviews, and the lack of regulatory finality).

An advantage of Option 2 is that it opens the process to the public at an early stage to address broad issues without beginning a rulemaking process. It also allows inclusion of other information and results, is consistent with the philosophy of the NA report, and, initially, resources would be lower than rulemaking. Disadvantages include that the total resources associated with the Option 2 and any follow-on efforts could ultimately be similar to or larger than the processes described under Options 3a or 3b. Also, Option 2 does not build on the substantial efforts expended by NRC and stakeholders in conducting, participating in, and developing comments for, the 1999/2000 public meetings on the Issues Paper. In addition, because the time to develop a standard under Option 2 may be lengthy, it may be necessary to develop an interim approach, which may have certain limitations, as discussed previously under Option 1b.

Advantages of Option 3a are that it involves stakeholders at a very early stage in the process. In addition, it is consistent with OA2 and R1, R2, and R3, with the intent of developing an

acceptable approach. However, disadvantages include that it does not build on substantial efforts expended by NRC and stakeholders in conducting, participating in, and developing comments for, the 1999/2000 public meetings on the Issues Paper. In developing an overarching policy statement as suggested by R3, Option 3a may be repetitive of the effort already expended in preparing the policy guidelines contained in the performance goals of the Strategic Plan. The Strategic Plan provides NRC's policy and approach for evaluating issues, incorporates input from the public, licensees, and other interested parties, and contains a decision framework for guiding the staff's work. Thus, the Strategic Plan could be used as a policy-level, decision framework that can be applied to the control of solid materials, which may be more efficient than developing a new and separate policy statement as suggested by R3. Also, developing general policy issues could be repetitive of activities associated with the Below Regulatory Concern Policy which had significant expenditure of resources for a controversial policy that later was withdrawn. In addition, Option 3a could involve more resources than for rulemaking under Option 3b.

Advantages of Option 3b are that it provides more timely risk-informed criteria and a regulatory tool for licensees, promotes consistency within NRC offices and with international efforts, and presents the issues involved with the various approaches for control of solid material in an APA/NEPA forum through which the Federal agencies normally conduct their business. Disadvantages of Option 3b include that it will involve large resources for a complex, controversial rulemaking, when NRC has other high priorities involving health and safety issues, including those related to homeland security. Also, certain approaches are strongly opposed by stakeholders and thus the end result of this resource-intensive action is not clear. In particular, there is a diversity of stakeholder views that range from those that favor a standard for unrestricted use at an established dose criteria to those that favor a prohibition on all future releases and a recall of previous releases.

As noted previously, Option 3b includes alternative approaches that would entail varying levels of stakeholder involvement. While the enhanced rulemaking process might involve more resources than the more direct process, it would also be more in keeping with the performance goal of increasing public confidence and with the concepts of OA2 which notes that broad and meaningful stakeholder involvement in the decision-making process is important in the success of the process.

An advantage of Option 3c is that it could allow materials that were deemed most important to be worked on first and could focus stakeholder discussions on issues associated with that specific material and/or an associated approach for disposition of the material. Another advantage is that a narrowly focused rulemaking could be completed using fewer resources. Disadvantages of Option 3c are that if the Commission conducted rulemakings on other materials or approaches at a later time, this might involve duplication of effort and, ultimately, more total resources expended. Another disadvantage of the narrow effort of Option 3c is that it might be perceived as setting precedent for control of other solid materials.

If either Option 3a, 3b, or 3c is selected, NRC would carry out a process involving meaningful stakeholder involvement, which is the intent of any APA/NEPA process, as well as in keeping with OA2 and R1, R2, and R3. Both Option 3a and 3b are also processes by which the various alternatives for controlling solid material suggested by stakeholders, as well as the suggestions made in R4, R5, R6, and R7, could be explored.

Recommendation:

The acceptability of any standards-setting action depends on a variety of factors, including both the process to move discussions forward as well as the technical basis to support any criteria

that might be established. An important factor affecting any decision on how best to proceed is the safety significance of the matter under consideration. As noted in the NA report in OA1, the current approach is considered to provide a sufficient level of safety. The NA report (in R5) also notes that one of the potential criteria (i.e., 10 $\mu\text{Sv}/\text{yr}$ (1 mrem/yr)) discussed in the Issues Paper is a reasonable "starting point" regarding levels of risk when considering alternatives for controlling solid material. These statements call into question whether significant resources should be devoted to a rulemaking or other process that might have minimal impact on maintaining health and safety. However, the NA report also notes, and NRC staff tends to agree, that there are significant issues associated with implementing the current approach, and its replacement with a standard could improve NRC's overall efficiency and effectiveness, and likely reduce overall burden on stakeholders. The NA report also highlights that there are important issues of public confidence that need to be considered in any process for moving forward in this area.

After assessing these factors, the staff recommends conducting a rulemaking process. Specifically, the staff considers Option 3b to be the best means for providing support to the licensing offices in their handling of wide variety of cases involving control of solid material, and also incorporates beneficial features of the other options. Option 3b can involve the activities of an enhanced participatory rulemaking with opportunity for substantial and substantive stakeholder involvement beyond that previously used for the LTR, as described below. The staff considers Option 3b to be an appropriate balancing of the beneficial aspects of Option 3a and the direct proposed rule process noted as an alternative under Option 3b.

In developing a timetable for Option 3b, the staff has taken into account both the schedule for NRC's development of key technical bases and the admonition of R1, R2, and R6 to bring an appropriately complete information base (including characterization of various materials and individual, multiple, and collective exposures) to stakeholders as part of engaging them in meaningful dialogue. Thus, the staff recommends that efforts to engage the public as part of Option 3b begin when this information is more fully developed. This approach will also allow the staff to factor in other activities that are going on both nationally and internationally. Inclusion of all this material was noted earlier as a beneficial feature of Option 2. This approach would also allow the NRC to focus its resources at this time on more pressing issues, including homeland security. Finally, in the interim, the staff would continue with its current approach, as endorsed by the NA report in OA1, thereby incorporating the beneficial aspects of Option 1a.

The specific activities and timing of the staff's recommended approach involve completion of technical bases by mid-2003. The staff would then plan to engage stakeholders, in the fall of 2003, on the nature and scope of information that should be included in an ANPR, including invitation to a public meeting on this subject. The staff anticipates that the ANPR could then be issued for public comment in late 2003 and this comment process could be supplemented by holding 2 to 4 workshops on the ANPR. The first 1 to 2 of these workshops would be broad-based, seeking public comment on concerns, issues of trust, further analyses needed, and positions. The next 1 to 2 workshops would be focused on workable solutions on specific issues (e.g., restricted use) supplemented with focused meetings with specific stakeholders. Use of focused meetings, or other forum for seeking advice, could be vehicles by which advice and recommendations are obtained in keeping with the item in the August 18, 2000, SRM, regarding the steel industry's recommendation for a blue ribbon panel.

Alternatively, the Commission may prefer to proceed with a more focused effort than Option 3b by pursuing rulemaking for only certain material (Option 3c). While the overall process would be similar to that for Option 3b, the nature of the meetings and discussions could thus be focused on the material(s) being considered and specific solutions to issues surrounding those materials. If the Commission prefers this approach, the staff recommends that a decision on

the specific material to be addressed in such a focused rulemaking be made following completion of additional technical bases and the ANPR meetings, which could be used to better identify those material disposition issues most needing resolution by the licensed community.

The staff anticipates extending the Quarterly Report process for keeping the Commission and the public informed of the status of technical bases development and other related factors.

RESOURCES:

If Option 3b is chosen, the staff notes that a similar effort to establish criteria for license termination in Subpart E was a resource and time-intensive effort that spanned a period between 1991 and 1997, and required significant staff effort over those 6 years. Although the staff has previously obtained a range of stakeholder views and developed technical bases on control of solid material, the strong and diverse viewpoints held by stakeholders indicate that the resources to be expended here may be similar to, or greater than, the experience of the LTR. Thus, Option 3b is anticipated to involve a minimum of 10 to 15 full-time equivalents (FTEs) and over \$1 million in contract support, over a 3 to 4 year period, to develop a final rule, prepare the regulatory analyses and generic environmental impact statement, develop technical bases for implementation, respond to public comments, and conduct public workshops. For Option 3b, FTE resources and funding for contract support are available in the current FY 2003 budget; resources for control of solid materials-related activities beyond FY2003 have been addressed in the proposed budget request under rulemaking activities.

Under Option 3c, resources might be somewhat reduced, at least initially. It is estimated that both Options 2 and 3a, if they ultimately led to rulemaking, could involve more resources than Option 3b because they would begin with broader initial discussions with stakeholders than Option 3b. However, initially it is estimated that Option 2 would involve 1.5 to 2 FTEs, and about \$300K-500K, to conduct meetings on the NA report, follow other activities, and further develop technical bases. Additional resources for these technical bases would be addressed through the PBPM process. Harmonization of the current practice under Option 1b would involve about 2 to 3 FTE and limited additional funding to review areas and prepare staff guidelines in areas where greater staff consistency can be developed. For Options 1a and 1b, resources necessary to review activities on a case-by-case basis are separate and are included in the current budget. It is estimated that continuing the current approach under Option 1a

would involve at least 3 to 5 FTE; over the long term, this resource estimate could decrease, if rulemaking is conducted, because the staff would then have a more efficient and effective regulatory tool in place for licensing reviews.

COORDINATION:

This paper has been coordinated with the Office of the General Counsel, which has no legal objection. The Office of the Chief Financial Officer has reviewed this Commission Paper for resource impacts and has no objection.

/RA/

William D. Travers
Executive Director
for Operations

Attachments:

1. NRC staff review of NA report
2. Outline summary of NA report
3. Status of technical basis development
4. Review of international and domestic activities

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/RA/

William D. Travers
Executive Director
for Operations

Attachments:

1. NRC staff review of NA report
2. Outline summary of NA report
3. Status of technical basis development
4. Review of international and domestic activities

ADAMS PACKAGE ACCESSION NO. ML021480395

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