

Rulemaking Plan

Material Control and Accounting Amendments 10 CFR Parts 51, 61, 70, 72, 73, 74, 75, 76, and 150

Regulatory Issue

In a memorandum dated July 29, 1998, NMSS/FCSS requested a rulemaking to modify the submittal time for Material Balance Reports (MBRs) to coincide with the time of a facility's physical inventory in lieu of the current arbitrary dates of March 31 and September 30. This will eliminate one MBR for Category II and III facilities because they conduct annual physical inventories. The number of MBRs will not change for Category I facilities because they are required to conduct a physical inventory twice a year.

In 1982, NRC staff initiated an effort to move the material control and accounting (MC&A) requirements from 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," to 10 CFR Part 74, "Material Control and Accounting of Special Nuclear Material," and to make the requirements more performance oriented. In 1985, the MC&A requirements for Category III facilities were made more performance oriented and moved to Part 74. The requirements for Category I facilities were similarly moved in 1987. In a memorandum dated June 28, 1995, NMSS requested RES to initiate rulemaking to address needed changes in NRC's MC&A regulations. The purpose of these changes is to: (1) move the Category II requirements and general MC&A requirements to Part 74 so as to consolidate domestic MC&A requirements; (2) develop performance-oriented requirements for Category II¹ facilities to replace the prescriptive requirements currently found in Part 70; (3) correct typographical errors, outdated terminology, and implementation dates in Part 74; and (4) revise the categorical exclusion in 10 CFR 51.22(c)(12) to clarify that amendments to safeguards plans are included and to delete the specific references to other parts and make the reference more general.

Current Rule Requirements

Current regulations require facilities to complete their MBRs (DOE/NRC-742) within 30 days of March 31 and September 30 of each year.

The current general MC&A requirements in Part 70 define the types of records to be maintained and their retention periods and a requirement that licensees provide certain records to the NRC before a license is terminated, or that a licensee provide these records to a new licensee, if licensed activities are transferred. These recordkeeping requirements apply to MBRs and nuclear material transfer reports. Licensees that possess more than one effective kilogram of special nuclear material must establish and follow written procedures and those having more than 350 grams must conduct a physical inventory every twelve months.

Current domestic MC&A regulations in Part 70 for licensees who possess greater than one effective kilogram of strategic special nuclear material in irradiated fuel reprocessing operations

¹A Category II licensee is one that is licensed to possess special nuclear material of moderate strategic significance. Please note that there are no operating Category II licensed facilities at this time. General Atomics is the sole licensed Category II facility, the facility has a possession-only-license and is undergoing decommissioning.

or moderate strategic special nuclear material require a measurement control program for special nuclear materials control and accounting measurements and must establish and follow written MC&A procedures. These licensees are required to have procedures that cover tamper-safe devices, inventory records, unique identification of items, records of material added to or removed from the process, and transfers of material. Licensees are required to conduct physical inventories in accordance with procedures, calculate material balance, reconcile the book record, maintain records, and establish a system of control and accountability so that the limits of error for any material unaccounted for do not exceed specified limits. Licensees are also required to submit a full description of their program.

The categorical exclusion (§ 51.22(c)(12)) covers the issuance of a license pursuant to Parts 50, 60, 61, 70, 72, or 75 of Chapter I of Title 10 of the Code of Federal Regulations relating to safeguards matters or approval of a safeguards plan.

Regulatory Problem to be Resolved

The current regulations require MBRs (DOE/NRC-742) to be completed within 30 days of March 31 and September 30 of each year. These reports are typically based on book values as opposed to physical inventory results because the dates do not always coincide with the time frame for a facility's physical inventory. In addition, physical inventories for Category II and III facilities are conducted on an annual basis, not a semiannual basis. By revising the time frame to complete their MBRs to coincide with the physical inventory and providing additional time to complete the paperwork, the regulatory burden on the licensee would be reduced. The industry has indicated support for this initiative through the Nuclear Materials Management and Safeguards System (NMMSS) users group. Currently, the NRC is notified 5 to 8 times each year that licensees need additional time to complete these reports.

In the current regulations, the MC&A requirements for Category II facilities and the general MC&A requirements have been interspersed among the safety and general licensing requirements of Part 70. The rulemaking envisioned by this plan would move these remaining MC&A requirements to Part 74 to avoid confusion with the safety requirements in Part 70 and to provide for the consolidation of domestic MC&A requirements. Further, portions of the current rules regarding Category II material in Part 70 are considered overly prescriptive. This rulemaking would convert the prescriptive regulations into performance-oriented requirements. Conforming changes would also be made to Parts 61, 73, 75, 76, and 150 to reflect the relocations.

The currently effective categorical exclusion for approval of safeguards plans does not clearly include the approval of an amendment to a safeguards plan. It was clearly the intent of the Commission to allow the categorical exclusion for both the initial approval of a safeguards plan submittal and any revised plan submittal. By adding language covering revisions to safeguards plans, this inadvertent omission would be rectified. In addition, the categorical exclusion currently lists several parts; by providing a generic reference to any part of Chapter I of Title 10 of the Code of Federal Regulations, it would correct the current listing and avoid the need for changes due to new parts being added.

Rulemaking Options

1. Maintain the status quo - no action.

One alternative to amending the regulations is to maintain the current regulations without change. The advantages of the no action alternative is that the resources expended on the rulemaking and guidance development could be applied to other activities. Further, there is no urgency to make the changes to the Category II requirements because there are currently no active Category II licensees. The current system has worked reasonably well, and the proposed changes to consolidate the MC&A requirements in Part 74 may be desirable but not necessary. On the negative side, the MC&A requirements are located in two parts of Chapter I of 10 CFR, which can cause confusion, particularly for licensees who refer to the general requirements in Part 70. Consolidation of domestic MC&A requirements would not occur. Additionally, the regulatory burden reductions to be gained by changing the timing for the MBRs would not be achieved.

2. Revise the timeframes for the MBRs.

A second alternative would be to revise the MBR timeframes but not move the MC&A requirements to Part 74 or make the Category II requirements performance oriented. This alternative would involve the changes described in items 15 and 19 in the Appendix to this rulemaking plan. One advantage of this alternative is that there would be a reduction in burden for licensees (primarily reactor licensees) associated with the changes to the MBR. One MBR per year at the time of the physical inventory would still provide for adequate safeguards for Category II and III facilities. Licensees have indicated support for this change through the NMMSS users group. In addition, resources would not be used to change and move requirements for nonexistent Category II facilities. In addition to reducing the regulatory burden on licensees, the changes would enhance the efficiency of NMMSS. In the case of the gaseous diffusion plants and their large number of transactions, this change would not preclude them from continuing to request monthly summaries from NMMSS. On the negative side, consolidation of domestic MC&A requirements would not occur.

3. Move the general and Category II MC&A requirements and make them performance based.

A third alternative is to make the changes to the MC&A requirements and move them to Part 74, but not change the timeframes for the MBRs. This alternative would involve the changes described in the Appendix (minus items 15 and 19) to this rulemaking plan. One advantage of this alternative is that domestic MC&A requirements would be consolidated and would provide a graded, performance-oriented approach to MC&A regulation. In addition, the existing typographical errors, outdated terminology, and old implementation dates would be corrected. On the other hand, there are no active Category II licensees at this time and the resources for this rulemaking could be applied to other activities. The regulatory burden reductions to be gained by changing the timing for the MBRs would not be achieved.

4. Move the general and Category II MC&A requirements, make the Category II requirements performance based, and revise the timeframes for the MBRs.

The fourth alternative includes revising the MBR timeframes, moving the MC&A requirements to Part 74, and making the Category II requirements performance based. The changes are

briefly described in the Appendix to this rulemaking plan. One advantage of this alternative is there would be a reduction in burden for licensees associated with the changes to the MBR. One MBR per year at the time of the physical inventory would still provide for adequate safeguards for Category III facilities. Licensees have indicated support for this change through the NMMSS users group. In addition to reducing the regulatory burden on licensees, the change would enhance the efficiency of NMMSS. In the case of the gaseous diffusion plants (GDPs) and their large number of transactions, this change would not preclude the GDPs from continuing to request monthly summaries from NMMSS. Another advantage is that domestic MC&A requirements would be consolidated and would provide a graded, performance-oriented approach to MC&A regulation. In addition the existing typographical errors, outdated terminology, and old implementation dates would be corrected. A disadvantage of this alternative is that it would require NRC to expend resources to revise MC&A requirements for nonexistent (or inactive) Category II facilities.

The preferred alternative is Option 4. Option 4 would result in making the MBR process more efficient and reducing by half (about 1215 man-hours) the burden on industry of producing the MBRs. Option 4 would also result in the consolidation of the MC&A requirements in Part 74 and adoption of more performance-oriented regulations. These modifications would enhance the regulatory process by providing any future Category II licensees a better understanding of the procedures and requirements for MC&A. The principal cost for this action would be the modest expenditure of NRC staff resources to promulgate this rulemaking; resources necessary for moving the MC&A requirements and changing the Category II requirements would not be a significant increase over the resources necessary for changing the MBR process. On this basis, it is recommended that the staff proceed with Option 4. However, there are no active Category II licensees at this time that would benefit from the revised regulations for Category II facilities, and although reactor licensees and material licensees would benefit from the changes to the MBR schedule, the burden reduction is small. Therefore, the rulemaking would be done on a medium-priority basis which means that the resources will be used for this rulemaking only on an as-available basis.

OGC Legal Analysis

The proposed amendments would consolidate in one place the MC&A requirements for Category II facilities with the rest of the MC&A requirements for Categories I & III facilities. These requirements would also be made more performance oriented, consistent with the existing MC&A requirements for Categories I & III facilities. In addition, the categorical exclusion from the requirement to perform an environmental review would be broadened to include amendments of safeguards plans, as well as made general enough to cover all safeguards plans and amendments for all licenses issued under NRC authority in Chapter 1 of Title 10, to avoid the need to amend the subsection when new licensing parts are added. Finally, the requirement for MBRs to be prepared within 30 days of March 31 and September 30 would be changed to coincide with the requirement for a physical inventory. For Category II and III facilities that are required to have an annual physical inventory, this would result in a decrease in MBR reporting frequency from twice a year to once a year. For Category I facilities, which are required to conduct physical inventories twice a year, the frequency would remain the same, but would be synchronized with the physical inventories rather than being conducted on arbitrary fixed dates.

Sections of the proposed rule would require preparation of an environmental assessment. Those parts of the proposed rule which involve solely recordkeeping and reporting requirements would qualify for the categorical exclusions in § 51.22(c)(3)(ii) and (iii), and would not require the preparation of an environmental assessment.

The portions of the rule that concern Category II facilities cannot be considered backfits because there are no operating licensed Category II facilities that are subject to backfit evaluation under §§ 50.109, 72.62, or 76.76. With regard to the MBR reporting changes, OGC has taken the position that changes to recordkeeping and reporting requirements are not subject to the Backfit Rule and the Commission has not expressed disagreement with this position (see SECY-93-086 dated April 1, 1993, and the associated June 30, 1993 SRM). Since parts of the proposed rulemaking concern only recordkeeping and reporting requirements, there is no requirement for a backfit analysis under §§ 50.109, 72.62, or 76.76 for these rule changes. However, a regulatory analysis will have to be prepared for the entire proposed rule.

It is unlikely this rule would be considered a “major rule” under the Small Business Regulatory Enforcement Fairness Act, because it is not likely to result in an annual effect on the economy of \$100 million or more. If the rule is not a major rule, then the Act’s 60 day period before effectiveness is not applicable.

The proposed rule contains changed reporting requirements and would have to be evaluated by the Office of Management and Budget for purposes of the Paperwork Reduction Act of 1995.

Agreement State compatibility issues must be identified and Agreement State comments on the rulemaking plan must be requested and addressed.

In conclusion, there are no known bases for legal objection to the planned rulemaking.

Backfit analysis

The portions of the rule that concern Category II facilities cannot be considered backfits because there are no operating licensed Category II facilities that are subject to backfit evaluation under §§ 50.109, 72.62, or 76.76. The only licensed Category II facility has a Part 70 possession-only license and is undergoing decommissioning. Regarding the MBR reporting changes, reporting requirements are not subject to the Backfit Rule. Therefore, there is no requirement for a backfit analysis under §§ 50.109, 72.62, or 76.76 for these rule changes.

Paperwork Reduction Act Statement

The Office of the Chief Information Officer has reviewed the rulemaking plan for information technology and information management implications and concurs in it. However, the plan suggests changes in information collection requirements that require review by OCIO to determine the level of review by the Office of Management and Budget (OMB) before the proposed rule is forwarded to the Federal Register for publication.

Regulatory Analysis

Option 4 would consolidate the MC&A requirements in Part 74 and adopt more performance-oriented regulations. These modifications should enhance the regulatory process by providing any future Category II licensees a better understanding of the procedures and requirements for MC&A. The MBR process would become more efficient and the burden of producing the MBRs would be reduced by a total of approximately 1,215 staff-hours. Industry has expressed support for this change. In addition to reducing the regulatory burden on licensees, the changes would enhance the efficiency of NMMSS. In the case of the GDPs and their large number of transactions, this change would not preclude them from continuing to request monthly summaries from NMMSS. The principal cost for this action would be the modest expenditure of NRC staff resources to promulgate this rulemaking.

Agreement State Implementation Issues

Changes impacting § 70.51 (a) and (b), and conforming changes to Part 61 and §§ 70.19(c) and 150.20(b) are Category C compatibility items. Agreement States would be required to adopt the essential objectives; however, the manner in which these essential objectives are addressed would not need to be the same as the NRC. A conforming change to § 70.8(b) is a Category D compatibility item. This program element does not need to be adopted by Agreement States for purposes of compatibility. The rest of the changes are Category NRC compatibility items and therefore, are areas of NRC exclusive authority.

The draft Rulemaking Plan was provided to the Agreement States on February 10, 2000, for a period of 45 days to obtain their input. The comment period closed on March 27, 2000. No comments were received.

Supporting Documents

Parts of the proposed rule would require preparation of an environmental assessment. Those parts of the proposed rule that involve solely recordkeeping and reporting requirements would qualify for the categorical exclusions in §51.22(c)(3)(ii) and (iii), and would not require preparation of an environmental assessment. Because the rule provides for a reduction in the information collection for licensees, the information collection burden under the Paperwork Reduction Act will need to be addressed. The staff will also prepare a Regulatory Analysis.

Minor changes will be necessary to NUREG/BR-0007, "Instructions for Completing Material Balance Report and Physical Inventory Listing." Minor changes will also be necessary to the following documents: NUREG/BR-0096, "Instructions and Guidance for Completing Physical Inventory Summary Reports," NUREG-1065 Rev. 2, "Acceptable Standard Format and Content for the Fundamental Nuclear Material Control (FNMC) Plan Required for Low-Enriched Uranium Facilities," NUREG-1280, Rev. 1, "Standard Format and Content Acceptance Criteria for the Material Control and Accounting (MC&A) Reform Amendment," and NUREG/CR-5734, "NUREG/CR-5734, "Recommendations to the NRC on Acceptable Standard Format and Content for the Fundamental Nuclear Material Control (FNMC) Plan Required for Low-Enriched Uranium Enrichment Facilities."

Resources required

1.2 FTE will be required to complete and implement the rulemaking. These resources are included in the current budget.

NMSS - 1.0 FTE
Other - 0.2 FTE

Lead Office Staff and Staff From Supporting Offices - Concurring Official

Merri Horn, NMSS Task Leader	W. Kane, NMSS
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Public Participation

There is no need for formal enhanced public participation for this rulemaking. The rulemaking will use the NRC Rulemaking Website to enhance input from the public. The rulemaking will also be discussed at the next NMMSS users group meeting.

EDO or Commission Issuance

The proposed and final rule will be approved by the Commission because they contain substantive changes to MC&A regulations that require Commission approval.

Schedule

Proposed rule to the EDO	9 months after approval of rulemaking plan
OMB clearance package submitted to OMB	no later than the date the proposed rule is forwarded to the <u>Federal Register</u> for publication
Final rule to EDO	12 months after public comment period closes

Appendix

Summary of Proposed Rule Changes

Material Control and Accounting Amendments 10 CFR Parts 51, 61, 70, 72, 73, 74, 75, 76, and 150

The following is a summary of the proposed changes under Option 4.

1. Revise § 51.22(c)(12) to remove references limiting it to licensees or safeguards plans issued under Parts 50, 60, 61, 70, 72, 73, and 75 and to include a reference to safeguards plan revisions.
2. Revise § 61.80(g) to replace references to §§ 70.53 and 70.54 which will be deleted, with references to Part 74.
3. Revise §§ 70.8(b) and (c), and 74.8(b) and (c) to change the OMB collection requirements to reflect moved sections.
4. Revise § 70.19(c) to change the reference from §70.51 to Part 74.
5. Revise §70.20a(a) to add a reference to § 74.19.
6. Revise § 70.22(b) because the transferring of Category II MC&A requirements from Part 70 to Part 74 necessitates the deletion of "§ 70.58" and the addition of the Part 74 reference near the end of § 70.22(b).
7. Revise § 70.23(a)(6) to correct a reference to an incorrect section.
8. Revise § 70.32(c)(1)(i), (ii), & (iii) to reflect the transfer of remaining MC&A requirements (other than those pertaining to license applications and license amendments) in Part 70 to Part 74, to correct an error in wording, and to clarify that changes to a licensee's MC&A program that represent a decrease in effectiveness (as opposed to changes allowed under § 70.32(c)(1)(iii)) must be made via an amendment application pursuant to § 70.34, consistent with current licensing policy.
9. The MC&A requirements in § 70.51 will be deleted because the information and requirements in this section will be replaced by the information and requirements in Part 74. The requirements in § 70.51(b) (6) and (7) will be retained.
10. Revise § 70.52 to move the MC&A reporting because it is now fully covered by § 74.11.
11. Section 70.53 will be deleted in its entirety because, with the change in the scope of Part 74, the requirements in this section will now be covered by Part 74.

12. Section 70.54 will be deleted in its entirety because with the change in scope of Part 74, the requirements in this section will now be covered by the requirements found in Part 74.
13. Section 70.57 will be deleted in its entirety because the information and requirements in this section will be replaced by the information and requirements in Part 74.
14. Section 70.58 will be deleted in its entirety because the information and requirements in this section will be replaced by the information and requirements in Part 74.
15. Revise § 72.76 to require a Material Balance Report to be submitted within 60 calendar days of the start of the physical inventory.
16. Revise §73.67 to replace references to §70.54 which will be deleted, with references to Part 74.
17. Modify § 74.1 (Purpose) and § 74.2 (Scope) to reflect that the general MC&A and moderate SNM regulations were moved from Part 70.
18. Modify and expand § 74.4 (Definitions) to include certain non-statistical definitions currently in §§ 70.51(a), and 70.57(a), and to clarify some existing non-statistical definitions.
19. Paragraph 74.13(b) will be deleted in its entirety and paragraphs (a)(1) and (a)(2) will be redesignated as (a) and (b) respectively. The new paragraph (a) will be revised to require a Material Balance Report to be submitted: (1) within 60 calendar days of the start of physical inventory required in § 74.31(c)(5), § 74.33(c)(4), or 74.43(c)(6) or; (2) within 45 calendar days of the start of the physical inventories required in § 74.59(f)(1).
20. Paragraphs 74.17(a), (b), and (c), Special nuclear material physical inventory summary report, will be edited for consistency with other changes.
21. A new § 74.19 under subpart B---General Reporting and Recordkeeping Requirements will be added. The transferring of general MC&A requirements from Part 70 to Part 74 necessitates a new section within subpart B of Part 74. The retention period for inventory records will be reduced to 3 years following disposal.
22. Miscellaneous corrections and conforming changes will be made to § 74.31(b) by deleting §§ 74.31(b)(1) and (b)(2) and revising § 74.31(b). This is because the specific dates of August 26, 1985, and December 23, 1985, are no longer applicable.
23. Paragraph 74.31(c)(4) will be revised to state "9000 grams" instead of "9 kilograms". The use of "9 kilograms" instead of "9,000 grams" suggests that the NRC will accept a rounding to the nearest kilogram, when in fact we require a rounding to the nearest gram.
24. Under Subpart D---Special Nuclear Material of Moderate Strategic Significance (currently reserved for Category II MC&A requirements) new § 74.41, Nuclear material

control and accounting for special nuclear material of moderate strategic significance, § 74.43, Internal controls, inventory, and records, and § 74.45, Measurements and measurement control, will be inserted to replace prescriptive regulations from Part 70 with performance-oriented regulations.

25. Miscellaneous changes and corrections to § 74.51 will be made. Sections 74.51(c)(1) and (c)(2) will be deleted in their entirety, and §§ 74.51(c) and 74.51(d)(1) will be revised. This is because (1) the specific dates of September 25, 1987, and April 29, 1988, are no longer applicable; (2) the combining and revision of § 74.51(c)(1) and (2) into a new § 74.51(c) necessitates a reference to paragraph (c), rather than to paragraph (c)(2); and (3) a reference to §74.57(f) was accidentally omitted from the original § 74.51(d)(1), and will now be included.
26. Section 74.57 will be revised. Due to an NRC organizational change, the "Domestic Safeguards and Regional Oversight Branch" and the "Division of Safeguards and Transportation" are no longer used as names of organizational units. Likewise, the stated phone number is no longer applicable. Notifications will be made to the Operations Center instead of the Branch.
27. Sections 74.59(d)(1) and 74.59(h)(2)(ii) will be revised to correct typographical errors "or" should be "on" and "received should be "recovered".
28. Section 74.59(f)(1)(i) will be revised to: (1) provide proper identification of acronyms; (2) require investigation of any ID which is rejected by a statistical test that has a 90 percent power of detecting a discrepancy; (3) correct the accidental omission of the phrase "high enriched uranium or;" and (4) provide improved punctuation.
29. Section 74.59(f)(1)(iii) will be revised to require reports be submitted to the office instead of the Division, and to correct a typographical error ("and difference" should be "any difference").
30. Revise §75.21 to replace the reference to §70.51 with the reference to Part 74.
31. Revise §§ 76.113, 76.115, and 76.117 to remove the references to §§ 70.51, 70.53, 70.54, 70.57, and 70.58 and replace them with the correct Part 74 reference.
32. In § 150.20(b) revise the reference to §§ 70.51, and 70.53 to reflect the new Part 74 reference.

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