

(STP-01-085, December 2001, Program, Event Reporting)
December 21, 2001

ALL AGREEMENT STATES
MINNESOTA, PENNSYLVANIA, WISCONSIN

PROGRAM MANAGEMENT INFORMATION: REQUEST FOR COMMENT ON ACTION PLAN TO IMPLEMENT RECOMMENDATIONS OF NRC/AGREEMENT STATE WORKING GROUP ON EVENT REPORTING (STP-01- 085)

I am writing to ask for your review and comment on the enclosed Action Plan to respond to the recommendations of the "Final Report of the Working Group on Event Reporting" dated April 2001.¹ The Working Group (WG) was established in April 2000, to review the current event reporting process and develop recommendations to provide a more realistic, efficient and effective program.

NRC staff discussed a proposed approach to respond to the WG recommendations with the Organization of Agreement States Executive Board. Under the proposed approach, NRC staff would draft an Action Plan and subsequently share it with the Agreement States for review and comment. NRC staff has developed the enclosed Action Plan to provide a proposed response to each WG recommendation. The WG report includes 33 specific recommendations, with priorities, and 62 recommended rule changes. The Action Plan endorses 28 recommendations and 44 recommended rule changes. For each recommendation the Action Plan identifies lead NRC offices that would be responsible for implementation. Many of the recommendations will also involve State coordination, cooperation and assistance. The Action Plan also lists the WG recommendations which were not endorsed.

For those recommendations involving suggested changes to current reporting requirements, NRC will, as part of current and future rulemaking actions, review the identified reporting requirements, revise them as necessary, and consider whether it is appropriate to consolidate or reference them in a new reporting subpart. NRC does not plan, at this time, to initiate a separate rulemaking to specifically address the WG rulemaking recommendations.

We would especially appreciate comments on any items which you believe deserve priority attention and those which you endorse. We would also appreciate your indication of particular tasks and issues where you would be willing to provide support.

We would appreciate your comments* within 45 days of receipt of this letter.

¹*Final Report of the Working Group on Event Reporting*, dated April 2001 (ADAMS Accession No. ML011220065).

*This information request has been approved by OMB 3150-0029, expiration 06/30/04. The estimated burden per response to comply with this voluntary collection is approximately 6 hours. Forward any comments regarding the burden estimate to the Information and Records Branch (T-6F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to the Paperwork Reduction Project (3150-0029), Office of Management and Budget, Washington, DC 20503. If a document does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information.

If you have any questions on this correspondence, please contact me or the individual named below.

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/RA/

Paul H. Lohaus, Director
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Enclosure:
As stated

cc WG Team Members:
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***Action Plan
to
Respond to the Recommendations
of the
Working Group on Event Reporting***

**Dated: December 5, 2001
U.S. Nuclear Regulatory Commission**

Recommendations on Event Reporting Improvements—An Action Plan

Executive Summary

In May 2001, the Working Group on Event Reporting (WG) issued its final report. The WG report included 33 specific recommendations, with priorities, and 62 recommended rule changes. Using the WG report as a starting point, an Action Plan for improvements in event reporting was developed through a multi step process, described herein.

This Action Plan includes 28 recommendations, and identifies the NRC organizations that would be responsible for implementation, and 44 recommended rule changes that should be considered as part of the performance goal initiative, as outlined in the Strategic Plan, to reduce unnecessary regulatory burden (RUB).

One identified item did require prompt action. Recommendation 5-1, "IRO [Incident Response Organization] and STP [Office of State and Tribal Programs] should establish procedures for confirming e-mail reports of significant events from Agreement States to the NRC Operations Center" was considered to have safety impact. Accordingly, it was addressed and has been implemented.

This Action Plan does not yet include estimates of resources to implement these recommendations, estimated times to complete the recommended actions, or prioritization of the recommendations. The planned approach is to have resource and time estimates developed by the responsible organizations, as part of the Planning, Budgeting, Program Management (PBPM) process, when decisions on priority are being reached for the Operating Plan. Also, implementation of this initiative on improvements in event reporting will be integrated with the other various materials initiatives currently under consideration. We would expect that these actions will become part of the operating plan for each organization, and that resources and schedules would be coordinated to produce an integrated plan upon which senior management can reach alignment.

For those recommendations involving possible rule changes, the Division of Industrial and Medical Nuclear Safety/Rulemaking and Guidance Branch (IMNS/RGB) will, as part of current and future rulemaking actions (reflecting priorities in the Rulemaking Plan), review the reporting requirements in the Subpart or Part, revise them as necessary, and consider whether it is appropriate to consolidate or reference them in a reporting subpart. NRC does not plan, at this time, to initiate a separate rulemaking to specifically address the rulemaking recommendations.

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Attachment

Introduction

In May 2001, the Working Group on Event Reporting (WG) issued its final report.* The WG report included 33 specific recommendations, with priorities,** and 62 recommended rule changes.

The recommendations listed below are the result of a process that included:

1. an independent review of the recommendations from the WG, as contained in its report (issued 5/17/01) from a technical and administrative point of view;
2. a meeting, on 7/26/01, with representatives from IMNS/OD, IMNS/MSIB, IMNS/RGB, IRO, and OSTP (A representative from FCSS was unable to attend, but the decisions of the group, including recommendations to endorse, were later reviewed with FCSS.);
3. a meeting, on 8/1/01, between IMNS/MSIB and IMNS/RGB, focusing on recommended rule changes;
4. an opportunity for IMNS/RGB, FCSS, OSTP, IRO, for the Regions, and for WGs that received information copies of the WG report (National Materials Program, IMPEP Lessons Learned, Phase II Review of the Byproduct Materials Program) to comment on draft recommendations and to provide estimates of completion dates for acting on each of the recommendations; and
5. a meeting, on 8/30/01, with representatives from IMNS/MSIB, IMNS/RGB, and OSTP, to discuss the draft Action Plan.

This Action Plan includes 28 recommendations, with organizations responsible for implementation, and 44 recommended rule changes that should be considered as part of the performance goal initiative, as outlined in the Strategic Plan, to reduce unnecessary regulatory burden (RUB). All of the NRC organizations responsible for implementation of this Action Plan have considered the appropriateness of their proposed actions in light of the increased workload resulting from the events of 9/11 and have endorsed these recommendations.

*"Final Report of the Working Group on Event Reporting," dated April 2001 (ADAMS Accession No. ML011220065).

**The priorities are based on the Strategic Plan goals, but the ranking method "forced" one-third of the recommendations to be ranked "high", one-third to be ranked "medium," and one-third to be

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ranked “low” under the safety goal. Due to this forced ranking, the priorities in the WG report do not directly align with Agency-wide priorities and were not carried over into this Action Plan.

Most of the recommendations (all but one, that has already been addressed) do not impact the Agency’s safety performance goal, but are intended to improve effectiveness and efficiency. As such, their implementation is not time-critical.

Format of this Action Plan Document

This Action Plan follows the WG report format, which was divided into tasks, corresponding to those in its charter (Appendix A of the report), as follows:

Task 1	Comparison of NRC Strategic Plan and NRC Reporting Requirements
Task 2	Licensee Guidance and Agreement State Guidance
Task 3	Enhance NMED Reporting
Task 4a	Improve Understanding of Stakeholders
Task 4b	NMSS Generic Issues Program—Opportunities for Improvement
Task 5	Software Systems Review

Each section below includes the WG recommendations, numbered to reflect the task and the recommendation for the task, and the corresponding Action Plan recommendations, including responsible organizations (if the WG recommendation was endorsed). If more than one organization is listed, the first one is considered to be the lead unit.

For ease in using this Action Plan, it also includes the following three tables, located after the recommendations:

1. Table of WG recommendations that were not endorsed;
2. Table of endorsed WG recommendations that have already been implemented or for which no action is required; and
3. Table of endorsed WG recommendations by implementing unit(s).

One identified item did require prompt action. Recommendation 5-1, “IRO and STP should establish procedures for confirming e-mail reports of significant events from Agreement States to

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the NRC Operations Center” was considered to have safety impact. Accordingly, it was addressed and has been implemented.

This Action Plan does not yet include estimates of resources to implement these recommendations, estimated times to complete the recommended actions, or prioritization of the recommendations. The planned approach is to have resource and time estimates developed by the responsible organizations, as part of the PBPM process, when decisions on priority are being reached for the Operating Plan. Also, implementation of this initiative on improvements in event reporting will be integrated with the other various materials initiatives currently under consideration. We would expect that these actions will become part of the operating plan for each organization, and that resources and schedules would be coordinated to produce an integrated plan upon which senior management can reach alignment.

Recommendations

Task 1: Comparison of NRC Strategic Plan and NRC Reporting Requirements

Recommendation 1-1: We suggest that management consider revising the NRC Strategic Plan to add a measure for significant exposures exceeding specific levels without any reference to damage (i.e., 25 rem TEDE, chemical levels immediately dangerous to life or health (IDLH), etc.). We believe that the *occurrence* of significant exposures is a better measure of our performance as regulators. The ability of an individual to recover from an exposure should not influence our classification of the exposure as a significant event.

Not endorsed [Deaths and unintended permanent functional damage are metrics that are easily understood by and meaningful to our stakeholders, the public, and Congress.]

Recommendation 1-2: Revise the NMED procedures to start using the consequence field for exposures and establish standard codes for deaths and various injuries. In addition, consider guidance that licensees should include information on any deaths or injuries resulting from acute exposures in their written reports.

IMNS/MSIB action

Recommendation 1-3: Consider rulemaking to add reporting requirements similar to Appendix A of Part 70* to Parts 40 and 76.

*acute chemical exposures that could lead to irreversible or other serious, long-lasting health effects

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IMNS/RGB action (as part of ongoing efforts)

Recommendation 1-4: Establish guidance for Agreement States on when and how independent medical consultants should be used to identify exposures resulting in permanent, functional damage. This can be addressed during the implementation of new Part 35 requirements.

IMNS(MSIB)/OSTP action

Recommendation 1-5: The NRC Strategic Plan should be revised to define public domain as including unrestricted areas. “Unrestricted area” is defined in the regulations. In addition, the measure should define what quantity of uncontrolled material is significant. We suggest the thresholds specified in 10 CFR 20.2201(a)(1)(i) for immediate reports.

IMNS/MSIB action [Thresholds to be decided.]

Recommendation 1-6: Consider revising the NRC Strategic Plan to establish accidental criticalities as a strategic measure and loss of criticality controls as a performance measure.

Not endorsed [Deaths, unintended permanent functional damage, and adverse impact on the environment are metrics that are easily understood by and meaningful to our stakeholders, the public, and Congress. The consequences of an accidental criticality heavily depend on the circumstances of the occurrence and are not necessarily “catastrophic.”]

Recommendation 1-7: Consider revising the [overexposures] performance measure to state “radiation *and hazardous material* exposures” similar to the strategic measure for exposures.

FCSS action

Recommendation 1-8: Consider revising the NRC Strategic Plan to establish performance measures greater than zero. For chemical releases from milling and mining operations, we suggest measuring the number of chemical releases that require mitigation of environmental impacts. If a significant increase in the number of releases is detected, actions can be taken to adjust performance before a release occurs that cannot be mitigated.

Not endorsed [The fact that a performance measure is “no events” does not imply that the Agency is unaware of or not evaluating the importance of related but less serious

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events that occur. Also, attempts will nearly always be made to mitigate impacts; the performance goal is not met when events occur that cannot be mitigated within applicable regulatory limits using reasonably available methods. This is a metric that is easily understood by and meaningful to our stakeholders, the public, and Congress.]

Recommendation 1-9: Consider the reporting requirement recommendations in Appendix D and assign rulemaking actions to extend reporting times, clarify reporting requirements, and reconsider the need for reports of insignificant events.

IMNS/RGB action

Task 2: Licensee Guidance and Agreement State Guidance

Recommendation 2-1: Develop consistent format and terminology in licensing guidance (i.e., standard review plans, standard format and content guides, etc.). Each volume of NUREG-1556 should have guidance on event reporting in an appendix. Standard formatting and terminology guidelines should be established. All applicable reporting requirements should be addressed, even if the event occurs infrequently. Licensing guidance documents for fuel cycle facilities and other activities not addressed by NUREG-1556 should also have an appendix on event reporting. A pull-out page for use and distribution by inspectors could be a part of the appendix. This could be undertaken as NUREGs pertaining to licensing are revised.

IMNS/RGB action [For the NUREG-1556 series, the recommendations will be considered as the review/revision process starts for each subject-specific document.]
FCSS action (for standard review plans, standard format & content guides, etc.)

Recommendation 2-2: Establish a subsection in each Part of 10 CFR that contains or references all reporting requirements in the Part. Specific changes are identified in Appendix D. This could be accomplished as an administrative change and issued as a direct final rule. (*Note:* Agreement State regulations tend to be more consolidated than 10 CFR, but States should also consider the need to consolidate.)

IMNS/RGB action [Note that these changes cannot be accomplished as administrative changes.]

Recommendation 2-3: Create a dedicated web page for basic reporting requirement information with electronic links to more detailed information. It should have a search function that identifies the reporting requirements applicable to different activities. Assign a project manager to maintain

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the site as new regulations are issued. Withdraw NUREG-1460 from circulation. We believe maintaining a web site would be a more effective use of resources than maintaining a hard copy index of all reporting requirements. The web page should include links to the *Federal Register* statements of consideration applicable to each reporting requirement. (Proposed rules may contain better explanations than final rules.) Additional examples and guidance can be added to the page as appropriate.)

IMNS/MSIB action

Task 3: Enhance NMED Reporting

Recommendation 3-1: Management should establish acceptable goals and performance levels for the completeness of the NMED records. It is difficult to determine how much improvement is needed without knowing what level of quantity, quality, and consistency is acceptable. We suggest a goal of 100 percent complete for events counted under the NRC Strategic Plan. For other events, we suggest a goal of 95 percent complete.

IMNS/MSIB action [with graded approach to reflect event importance]

Recommendation 3-2: The instructions in 10 CFR for the preparation of written reports should be revised as rulemaking takes place to specify that reports include root causes, equipment serial numbers, and other important pieces of information. The regulations should have consistent formats and terminology across sections containing reporting requirements. Event information that is required for completeness of the NMED records needs to be explicitly stated in the instructions for preparing written reports.

IMNS/MSIB action [with need-specific approach based on event type]

Recommendation 3-3: Staff should periodically brief management on the NMED statistics on incomplete records as shown in Table 3-1. In the briefing, staff needs to examine the effectiveness of current mechanisms to ensure that the NMED records are complete, and make recommendations for improvements.

IMNS/MSIB action [Management to be kept apprised in IMPEP process.]

Recommendation 3-4: Staff should develop a statistical chart by NRC Regions and Agreement States, based on types of events and number of licensees in each event category, and periodically brief management on these. In the briefing, staff needs to provide analyses regarding

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the high or low event reporting rates in some Agreement States and NRC Regions, and make recommendations for improvements.

IMNS/MSIB action [Management to be kept apprised in IMPEP process.]

Task 4a: Improve Understanding of Stakeholders

Recommendation 4-1: The SA-300, “Handbook on Nuclear Material Event Reporting in the Agreement States,” should be revised to include a description of the [safety] performance goal and measures. Additionally, the basis for determining that reporting is an issue of compatibility should be clearly explained.

OSTP action

Recommendation 4-2: The time frame in which States are expected to report significant events to NRC should be re-evaluated. The group recommends Option 3.* See a related issue in Recommendation 5-4.

*Option 3: Agreement States report significant events to NRC within 48 hours, unless there is an immediate safety issue (e.g., stolen radiography source, etc.). Events with an immediate safety issue would be reported to NRC within 24 hours. NRC uses existing procedure for preparing PNs.

OSTP action

Recommendation 4-3: State efforts* should be utilized whenever possible, with NMSS serving as lead. As communications between NRC and Agreement States improve (see Recommendation 4-6), NMSS should identify State efforts that can be utilized during future assessments.

*evaluations for generic issues and/or trends

OSTP/IMNS(MSIB) action [including advisement of States that their efforts will be utilized]

Task 4b: NMSS Generic Issues Program—Opportunities for Improvement

Recommendation 4-4: Revise the procedures to reflect current practice. Assign responsibility for management review of events to Chief of the Materials Safety and Inspection Branch (MSIB). Other managers can continue to participate as their schedules permit.

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No action required [This recommendation has been implemented.]

Recommendation 4-5: Stop reviewing event reports for generic issues a few days after they are reported. Review event reports for generic issues *60 days* after the initial report date. The daily calls and briefings conducted by the IMNS Regional Coordinator are sufficient to identify and follow-up on immediate safety issues. Waiting 60 days will allow investigation reports to be completed and the assessment of generic issues will be more effective after investigation results are known. We believe this would improve the efficiency of the process because requests for additional information would be minimized.

No action required [This recommendation has been addressed through GAP procedure revision.]

Recommendation 4-6: NMSS should develop mechanisms to improve feedback including distribution of assessment results to State and Regional staff. Although the NMED Quarterly Report could be used to distribute assessment results, we believe a monthly e-mail to Regional and Agreement State counterparts over the RadRap system would be a better feedback mechanism. It would be more timely and it would provide a mechanism for discussion and information exchange. The NMED Quarterly Report could be used to distribute information to licensees after all internal stakeholders have had a chance to review and comment on the e-mail reports.

IMNS (MSIB)/OSTP action

Recommendation 4-7: NMSS should establish guidelines concerning appropriate methods to raise concerns about the adequacy of event response actions outside of this forum.*

*the monthly operational events briefing

No action required [No longer applicable, since operational events briefings were discontinued.]

Recommendation 4-8: NMSS should make a greater effort to announce issues of the NMED Quarterly Report when they are available. In addition, the status of each event-related performance measure from the NRC Strategic Plan should be incorporated into the report. NMSS should consider obtaining input from Agreement States when draft reports are being prepared.

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IMNS/MSIB action [The Strategic Plan portion of this recommendation is currently being implemented.]

Recommendation 4-9: The NMED Project Manager should work with fuel cycle staff to develop a section in the NMED Quarterly Report addressing fuel cycle events.

Not endorsed [FCSS preference]

Recommendation 4-10: NMSS should improve the timeliness of the NMSS Licensee Newsletter.

IMNS/RGB action [Safety issues that need to be promptly conveyed to licensees can and will be by issuance of information notices.]

Task 5: Software Systems Review

Recommendation 5-1: IRO and STP should establish procedures for confirming e-mail reports of significant events from Agreement States to the NRC Operations Center.

IRO/OSTP joint action [This recommendation was considered to have safety impact. Accordingly, it was addressed and has been implemented.]

Recommendation 5-2: The software used for the PN and MR systems is under the control of NRR. The Working Group believes the processes used in the existing systems are outdated and inefficient. However, it is our understanding that NRR has no plans to upgrade these systems. We believe that maintenance and troubleshooting will become more difficult as these systems age. We recommend that NMSS and the Regions work with NRR to develop a plan to upgrade the PN and MR systems.

IMNS/MSIB action

Recommendation 5-3: Add hyperlinks to reference documents. Often times staff refer to reference documents in order to extract event details that are not captured by the NMED record. In order to increase the efficiency of NMED, the Working Group recommends that the ADAMS accession number for all reference documents used to generate the NMED record be included as part of the event records and, if possible, create a hyperlink to ADAMS that automatically retrieves

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the reference documents. In order to achieve this unilaterally, all Agreement State documents will need to be input into ADAMS so that they can be assigned an accession number.

IMNS/MSIB action (except portions of recommendation on hyperlinks-not pursuing) [Note that ADAMS accession numbers are already entered into NMED records.]

Recommendation 5-4: The Working Group recommends that NRC delay the posting of Agreement State event reports to the Internet on a case-by-case basis, as requested by the reporting Agreement State. However, as a compromise between NRC's desire to release information to the public immediately and the Agreement States' jurisdiction over these events and the information, the delay should not exceed 48 hours. This time limit is consistent with the majority of the Agreement States' responses to this issue in the questionnaire. This recommendation should be considered concurrently with Recommendation 4-2, which would allow States 48 hours to report significant events to NRC. If Recommendation 4-2 is adopted, there may be no need for NRC to delay the release of Agreement State events.

IMNS (MSIB)/OSTP joint action [No action required if Recommendation 4-2 is adopted.]

Recommendation 5-5: The Working Group recommends that separate tracking systems continue to be used in the Regions. One Region stated that follow-up to an event is scheduled by the Regional Office and several things are taken into consideration, such as the urgency to obtain additional information, the potential safety significance, the prioritization of resources, and available opportunities. For events that do not require immediate follow-up, the projected schedule may shift due to higher priority activities. The follow-up process should be left up to the Region because there is little benefit in tracking such details on an agency-wide basis. Tracking at higher levels requires feeding a system with many low safety-significant events and may have the unintended effect of placing a higher priority on them.

No action required (if recommendation is adopted)

Secondary Recommendation (embedded in text of second paragraph, page 5-10 of report): A Region recommended that an electronic tracking system be developed by Headquarters and provided to the Regions for local tracking of actions. The Working Group does not endorse this suggestion, but recommends that NMSS share the software and data format that is used to track events in Headquarters for the purpose of generic follow-up (i.e., IETS). The Regions would then have the tools and a starting point for an electronic system that they can customize to meet their specific needs.

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IMNS/MSIB action

Recommendation 5-6: The Working Group recommends allowing the public access to NMED.
No action required [This recommendation is already being implemented.]

Recommendation 5-7: The Working Group believes that NRC should participate in the RADEV database maintained by IAEA. The database was developed with assistance from NRC and modeled after NRC's own event archive database, NMED. Information could be shared very easily by utilizing and transmitting the existing data in NMED. The impact on staff would be minimal, provided that an appropriate threshold for events is developed. NRC representatives are involved with the IAEA team responsible for the implementation, along with the development of the database. The IAEA team will determine the threshold for events that should be included. In general, however, the Working Group recommends that only significant events be included, such as those that resulted in AO criteria being exceeded or the loss or release of large amounts of radioactivity.

IMNS/MSIB action [IRO and OIP concur.]

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Summary Tables

Table I

Working Group Recommendations that Were Not Endorsed

<u>Task No.</u>	<u>Task Title</u>	<u>Recommendation No.</u>
1	Comparison of NRC Strategic Plan and NRC Reporting Requirements	1-1 1-6 1-8
2	Licensee Guidance and Agreement State Guidance	None
3	Enhance NMED Reporting	None
4a	Improve Understanding of Stakeholders	None
4b	NMSS Generic Issues Program— Opportunities for Improvement	4-9
5	Software Systems Review	None

Table 2

Endorsed Working Group Recommendations that Have Already Been Implemented
&/Or No Action Required

<u>Task No.</u>	<u>Task Title</u>	<u>Recommendation No.</u>
1	Comparison of NRC Strategic Plan and NRC Reporting Requirements	None
2	Licensee Guidance and Agreement State Guidance	None
3	Enhance NMED Reporting	None

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4a	Improve Understanding of Stakeholders	None
4b	NMSS Generic Issues Program— Opportunities for Improvement	4-4 4-5 4-7 4-8 (partial)
5	Software Systems Review	5-1 5-3 (partial) 5-5 5-6

Table 3

Endorsed Working Group Recommendations By Implementing Unit(s)

Note: If more than one organization is listed, the first one is considered to be the lead unit.

<u>Implementing Unit (no. of recs.)</u>	<u>Recommendation Nos.</u>
IMNS/MSIB (12)	1-2, 1-5 2-3 3-1, 3-2, 3-3, 3-4 4-8 5-2, 5-3, Secondary Recommendation, 5-7
IMNS/RGB (6)	1-3, 1-9 2-1, 2-2 4-10 Appendix D
IMNS(MSIB)/OSTP (3)	1-4 4-6 5-4
FCSS (1)	1-7
OSTP (2)	4-1, 4-2

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OSTP/IMNS (MSIB) (1)

4-3

Appendix D: Review of NRC Reporting Requirements

See attached pages. (Reference Recommendations 1-9 & 2-2.)

IMNS/RGB action [WG recommendations, as adjusted by decisions from joint

Branches/Divisions/Offices review.]

To implement Recommendations 1-3, 1-9, and 2-2, IMNS/RGB will, as part of current and future rulemaking actions (reflecting priorities in the Rulemaking Plan), review the reporting requirements in the Subpart or Part, revise them as necessary, and consider whether it is appropriate to consolidate or reference them in a reporting subpart. NRC does not plan, at this time, to initiate a separate rulemaking to specifically address the rulemaking recommendations.

Note that an SRM dated July 9, 2001, responding to SECY-01-0098, "Modification of 10 CFR Part 20 Reporting Requirements," approved staff's recommendation not to pursue rulemaking. However, as part of the Agency performance goal to reduce unnecessary paperwork by 25% over 5 years in the materials arena, IMNS/RGB is reviewing all applicable reporting and record keeping requirements. Pending the outcome of that review, recommendations regarding the need for rulemaking will be developed. The event reporting recommendations will be considered as part of this effort.

Appendix D

Recommendations on Event Reporting Improvements—An Action Plan

Appendix D

10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
Part 20 - Standards for Protection Against Radiation			
20.1906(d)(1)	(Immediate report) Removable contamination on package	Contaminated packages have generally low safety significance. Consider 24-hour report to NRC (keep immediate report to carrier)	<i>Disagree</i> Since the carrier knows, NRC should know.
(d)(2)	(Immediate report) Radiation levels on package	Locate or reference both in Reports Section (Subpart M)	<i>Agree</i>
20.2201(a)(1)(i)	(Immediate report) Lost/stolen/missing material \geq 1000 X App. C value		For some radionuclides, such as tritium and uranium, the criterion for immediate notification seems low, to very low; reevaluation is recommended; the overall criterion of 1000 x Appendix C values might also be reevaluated at some time. Also, exempting general licensees from the immediate notification paragraph might be considered.
(a)(1)(ii)	(30-day report) Lost/stolen/missing material \geq 10 X App. C value		

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
20.2202(a)(1) (b)(1)	(Immediate report) Exposure (real or threatened) \geq TEDE of 25 rem, or LDE of 75 rem, or SDE (WB or ME) of 250 rads (24-hour report) Exposure (real or threatened) \geq TEDE of 5 rem, or LDE of 15 rem, or SDE (WB or ME) of 50 rads		
20.2202(a)(2) (b)(2)	(Immediate report) Release where individual could have intake $> 5 \times$ ALI over 24 hrs. (24-hour report) Release where individual could have intake $> 1 \times$ ALI over 24 hrs.		
20.2203(a)(2)	(30-day report) Doses in excess of the limits in 20.1201, 20.1207, 20.1208, 20.1301, the license, or ALARA constraints for air emissions in 20.1101(d)		
20.2203(a)(3)(i) (a)(3)(ii)	(30-day report) Levels of radiation or concentrations of radioactive material in a restricted area in excess of any applicable limit in the license. (30-day report) Levels of radiation or concentrations of radioactive material in an unrestricted area in excess of 10 times any applicable limit in Part 20 or in the license.		
20.2203(a)(4)	(30-day report) For licensees subject to EPA standards in 10 CFR Part 190, levels of radiation or releases of radioactive material in excess of those standards, or license conditions related to those standards.		
20 App. G III.D.3	(60-day report) Notification of missing shipment of radioactive waste (made by land disposal operator)	Locate or reference in Reports Section (Subpart M)	<u>Agree</u>
20.App. G III.E.2	(2-week report) Written report of trace investigation of missing shipment (made by shipper)	Locate or reference in Reports Section (Subpart M)	<u>Agree</u>

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
Part 21 - Reporting of Defects and Noncompliance			
21.21(a)(2) (c)	(60-day report) Interim evaluation report that basic component may be defective, or may not comply with procurement document. (2-day report) Receipt of information reasonably indicating that a basic component is defective or fails to comply with its procurement document.		
Part 26 - Fitness for Duty Programs			
26.27(d)	(Immediate report) Notification of NRC employee's unfitness for duty	Inconsistent with report for licensee employee. Consider 24-hour report. Locate or reference in Reports Section (26.73)	<u>Disagree</u> The information is important for NRC to know immediately. <u>Agree</u>
26.73	(24-hour report) Fitness-for-duty significant event report		
Part 30 - Rules of General Applicability to Domestic Licensing of Byproduct Material			
30.9(b)	(2-day report) Receipt of any information having significant implication for public health and safety	Locate or reference in Reports Section (30.50 series)	<u>Agree</u>

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
30.34(h)	(Immediate report) The filing of any petition for bankruptcy by or against the licensee, its parent, or an affiliate.	<p>Material typically in storage. Question need for immediate action. Consider for 2-5 day report.</p> <p>Locate or reference in Reports Section (30.50 series).</p> <p>Require submittal of report to Document Control Desk with copy to Regional Administrator.</p>	<p><u>Agree</u> But only extend reporting time to 24 hours.</p> <p><u>Agree</u></p> <p><u>Agree</u></p>
30.50(a)	(4-hour report) Event that prevents immediate protective actions necessary to avoid overexposure or releases.	"Prevents immediate protective actions" is vague and difficult to interpret. Consider replacing with report of emergency actions similar to 72.75(b)(4).	<u>Disagree</u> Referenced section deals with deviations from license or CoC conditions or tech specs; materials licenses are too diverse to use such criteria.
30.50(b)(1)	(24-hour report) Unplanned contamination requiring access to be restricted for more than 24 hours (for reason other than decay of isotopes with half-lives < 24 hours).		
30.50(b)(2)	(24-hour report) Safety equipment is disabled or fails to function when it is required to be available and operable, and no redundant equipment is available and operable.		
30.50(b)(3)	(24-hour report) An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.		
30.50(b)(4)	(24-hour report) An unplanned fire or explosion damaging license material or any device, container, or equipment containing licensed material		
30.55(c)	(Prompt report) Attempted theft or unlawful diversion of tritium (10 curies at 1 time or 100 curies in a year)	Consider raising threshold or deleting requirement. One exit sign can exceed 10 curies.	<u>Agree</u> But note that example does not apply, as exit signs are GL and reports are not required.

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
Standard License Condition 165 in Volume 20 of NUREG-1556	(30-day report) Miscellaneous sealed source leak test results (presence of 0.005 microcuries or more of removable RAM) shall be reported in accordance with 30.50(c)(2).	Inconsistent with 5-day report required by other leak test regulations. Consider need for consistent requirements.	<u>Disagree</u> Sealed sources are typically controllable.
Part 31 - General Domestic Licenses for Byproduct Material			
31.5(c)(5)	(30-day report) Failure of, or damage to; or indication of possible failure of, or damage to the shielding, on-off mechanism, or indicator; or detection of 0.005 microcuries of removable RAM	Consider establishing Reports Section in Part 31 including this report plus a clear list of all the reports invoked by 31.2(a) and 31.5(c)(13)(ii).	<u>Agree</u>
Part 34 - Licenses for Industrial Radiography			
34.27(d)	(5-day report) Radiography sealed source leak test results (presence of 0.005 microcuries or more of removable RAM)	Locate or reference in Reports Section (Subpart F).	<u>Agree</u>
34.101(a)	(30-day report) Any of the following incidents involving radiographic equipment: (1) Unintentional disconnect of source assembly (2) Inability to retract and secure source assembly (3) Failure of any component critical to safe operation to perform its intended function		
Part 35 - Medical Use of Byproduct Material			
35.33(a)(1)	(1-day report) Medical misadministration	<i>Note: New Part 35 establishes a Reports Section (Subpart M).</i>	<u>Agree</u>
35.59(e)(2)	(5-day report) Medical sealed source leak test results (presence of 0.005 microcuries or more of removable RAM)	Compatibility inconsistent with other leak test requirements. Suggest compatibility "C."	<u>Disagree</u> Human use, so 5-day report is appropriate.

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
Standard License Condition 114 in Volume 20 of NUREG-1556	(5-day report) Gamma stereotactic radiosurgery (Gamma Knife) unit sealed source leak test results (presence of 0.005 microcuries or more of removable RAM)	<i>Note: Revision of Part 35 will supersede this condition.</i>	<u>Agree</u>
Part 36 - Licenses for Irradiators			
36.83(a)	(24-hour report) Irradiator events meeting the following conditions if not reported under other parts of NRC regulations: (1) Source stuck in unshielded position. (2) Fire or explosion in a radiation room. (3) Damage to the source racks. (4) Failure of source rack cable or drive mechanism. (5) Inoperable access control system. (6) Detection of radiation by product exit monitor. (7) Detection of radioactive contamination. (8) Structural damage to pool liner or walls. (9) Abnormal water loss or leakage from pool. (10) Pool water conductivity exceeding 100 microsiemens per centimeter.		
Part 39 - Licenses for Well Logging			
39.35(d)(2)	(5-day report) Well logging sealed source leak test results (presence of 0.005 microcuries or more of removable RAM)	Compatibility inconsistent with other leak test requirements. Suggest compatibility "C." Locate or reference in Reports Section (Subpart E).	<u>Disagree</u> Field use, so 5-day report is appropriate. <u>Agree</u>
39.77(a)	(Immediate report) Actual or potential rupture of sealed source capsule		
39.77(b)	(Various reports) Events reportable under 20.2201, 20.2202, 20.2203, and 30.50.	Redundant requirement. Consider deleting.	<u>Disagree</u> The section provides complete consolidation of reporting requirements for well loggers.
39.77(c)(1)	(Report when apparent) Irretrievable sealed source & request for approval to abandonment	Report appears to be rubber stamp. Consider authorizing licensees to abandon and simply notify NRC.	<u>Disagree</u> Important for NRC to have opportunity to advise licensee before licensee proceeds with abandonment.

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
Part 40 - Domestic Licensing of Source Material			
40.9(b)	(2-day report) Information having a significant implication for public health and safety or common defense & security	Locate or reference in Reports Section (40.60 series).	<u>Agree</u>
40.26(c)(2)	(Immediate report) Failure, or unusual conditions that if not corrected could lead to failure, in a tailings or waste retention system that results, or could result in release of tailings or waste into unrestricted area	Locate or reference in Reports Section (40.60 series).	<u>Agree</u>
40.41(f)	(Immediate report) The filing of any petition for bankruptcy by or against the licensee, its parent, or an affiliate.	Material typically in storage. Question need for immediate action. Consider for 2-5 day report. Locate or reference in Reports Section (40.60 series). Require submittal of report to Document Control Desk with copy to Regional Administrator.	<u>Agree</u> But only extend reporting time to 24 hours. <u>Agree</u> <u>Agree</u>
40.60(a)	(4-hour report) Event that prevents immediate protective actions necessary to avoid exposures to radiation or RAM or releases of licensed materials that could exceed reg limits	"Prevents immediate protective actions" is vague and difficult to interpret. Consider replacing with report of emergency actions similar to 72.75(b)(4).	<u>Disagree</u> Referenced section deals with deviations from license or CoC conditions or tech specs; materials licenses are too diverse to use such criteria.
40.60(b)(1)	(24-hour report) Unplanned contamination requiring access to be restricted for more than 24 hours (for reason other than decay of isotopes with half-lives < 24 hours).		
40.60(b)(2)	(24-hour report) Safety equipment is disabled or fails to function when it is required to be available and operable, and no redundant equipment is available and operable.		

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
40.60(b)(3)	(24-hour report) An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.		
40.60(b)(4)	(24-hour report) An unplanned fire or explosion damaging license material or any device, container, or equipment containing licensed material		
40.64(c)	(Prompt report) Attempted theft or unlawful diversion of more than 15 lbs. of uranium or thorium at 1 time or more than 150 lbs. in a calendar year	Consider raising threshold or deleting requirement. General license in 40.22 authorizes these quantities.	<u>Agree</u> Will be considered during current Part 40 rulemaking.
40 App A I Criterion 8A	(Immediate report) Failure or unusual conditions in a tailings or waste retention system [that could result in, or if left uncorrected could result in, the release of tailings or waste into unrestricted areas]	Locate or reference in Reports Section (40.60 series).	<u>Disagree</u> Mill requirements are consolidated in this appendix.
Standard License Condition in Section 5.7.8.3 of NUREG-1569	(24-hour report) In-situ leach groundwater monitoring well where any two excursion indicators have exceeded their respective upper control limit (UCL), or a single excursion indicator has exceeded its UCL by 20%.	No immediate actions by NRC are required. Consider 30-day written report.	<u>Disagree</u> The information is important for NRC to know.
Part 60 - Disposal of High-Level Radioactive Wastes in Geologic Repositories			
60.10(b)	(2-day report) Information having a significant implication for public health & safety or common defense & security	Locate or reference in Reports Section (Subpart D)	<u>Agree</u>

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
60.73	(Prompt report) Each deficiency found in the characteristics of the site, and design and construction of the geologic repository operations area which, were it to remain uncorrected, could: (a) be a substantial safety hazard, (b) represent a significant deviation from the design criteria and design bases stated in the application, or (c) represent a deviation from the conditions stated in the terms of a construction authorization or the license, including license specifications.		
Part 70 - Domestic Licensing of Special Nuclear Material			
70.9(b)	(2-day report) Information having a significant implication for public health & safety or common defense & security	Locate or reference in Reports Section (Subpart G).	<u>Agree</u>
70.32(a)(9)	(Immediate report) The filing of any petition for bankruptcy by or against the licensee, its parent, or an affiliate.	Material typically in storage. Question need for immediate action. Consider for 2-5 day report. Locate or reference in Reports Section (Subpart G). Require submittal of report to Document Control Desk with copy to Regional Administrator.	<u>Agree</u> But only extend reporting time to 24 hours. <u>Agree</u> <u>Agree</u>
70.50(a)	(4-hour report) Event that prevents immediate protection actions necessary to avoid exposure to radiation or RAM or releases of licensed material that could exceed regulatory limits	"Prevents immediate protective actions" is vague and difficult to interpret. Consider replacing with report of emergency actions similar to 72.75(b)(4).	<u>Disagree</u> Referenced section deals with deviations from license or CoC conditions or tech specs; materials licenses are too diverse to use such criteria.
70.50(b)(1)	(24-hour report) Unplanned contamination requiring access to be restricted for more than 24 hours (for reason other than decay of isotopes with half-lives < 24 hours).		

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
70.50(b)(2)	(24-hour report) Safety equipment is disabled or fails to function when it is required to be available and operable, and no redundant equipment is available and operable.		
70.50(b)(3)	(24-hour report) An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.		
70.50(b)(4)	(24-hour report) An unplanned fire or explosion damaging license material or any device, container, or equipment containing licensed material		
70.52(a)	(1-hour report) Accidental criticality or of any loss, other than normal operating loss, of SNM	The loss portion of this regulation is redundant with 20.2201. Consider deleting loss portion.	<i>Disagree</i> Not endorsed based on safeguards considerations. Need to reconcile with 20.2201.
70.52(b)	(1-hour report) Loss or theft or unlawful diversion of SNM or of any attempted theft or unlawful diversion of such material	This conflicts with thresholds for lost material in 20.2201. Consider using 20.2201 for actual losses and limiting this to attempted thefts of similar quantities.	<i>Disagree</i> Need to reconcile with 20.2201.
70 App A Sec. (a)(1)	(1-hour report) An inadvertent nuclear criticality	Redundant with 70.52(a) Consider consolidating regulations	<i>Disagree</i> Appendix A compiles reportable event requirements for Subpart H licensees.
70 App A Sec. (a)(2)	(1-hour report) Acute intake of 30 mg or greater of uranium in soluble form		
70 App A Sec. (a)(3)	(1-hour report) Acute chemical exposure that exceeds standards established under 70.61(b)(4)		
70 App A Sec. (a)(4)	(1-hour report) Event or condition such that no items relied on for safety, as documented in the Integrated Safety Analysis summary, remain available and reliable, in an accident sequence evaluated in the Integrated Safety Analysis, to perform their function: (i) In the context of the performance requirements in Sec. 70.61(b) and Sec. 70.61(c), or (ii) Prevent a nuclear criticality accident (i.e., loss of all controls in a particular sequence)		

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
70 App A Sec. (a)(5)	(1-hour report) Loss of controls such that only one item relied on for safety, as documented in the Integrated Safety Analysis summary, remains available and reliable to prevent a nuclear criticality accident, and has been in this state for greater than eight hours		
70 App A Sec. (b)(1)	(24-hour report) Any event or condition that results in the facility being in a state that was not analyzed, was improperly analyzed, or is different from that analyzed in the Integrated Safety Analysis, and which results in failure to meet the performance requirements of Sec. 70.61		
70 App A Sec. (b)(2)	(24-hour report) Loss or degradation of items relied on for safety that results in failure to meet the performance requirement of Sec. 70.61		
70 App A Sec. (b)(3)	(24-hour report) An acute chemical exposure to an individual that exceeds the quantitative standards that satisfy the requirements of Sec. 70.61(c)(4)		
70 App A Sec. (b)(4)	(24-hour report) Any natural phenomenon or other external event, including fires internal and external to the facility, that has affected or may have affected the intended safety function or availability or reliability of one or more items relied on for safety		
70 App A Sec. (b)(5)	(24-hour report) An occurrence of an event or process deviation that was considered in the Integrated Safety Analysis and: (i) Was dismissed due to its likelihood; or (ii) Was categorized as unlikely and whose associated unmitigated consequences would have exceeded those in Sec. 70.61(b) had the item(s) relied on for safety not performed their safety function(s)		
70 App A Sec. (c)	(Concurrent report) Any event or situation, related to the health and safety of the public or onsite personnel, or protection of the environment, for which a news release is planned or notification to other government agencies has been or will be made		

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
Part 71 - Packaging and Transportation of Radioactive Material			
71.7(b)	(2-day report) Information having a significant implication for public health & safety or common defense & security	Locate or reference in Reports Section (71.95).	<u>Agree</u>
71.95(a) (b)	(30-day report) Significant reduction in effectiveness of authorized packaging during use (30-day report) Safety defects in packaging after first use		
Part 72 - Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste			
72.11(b)	(2-day report) Information having significant implication for public health & safety or common defense & security	Locate or reference in Reports Section (Subpart D).	<u>Agree</u>

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
72.44(b)(6)	(Immediate report) The filing of any petition for bankruptcy by or against the licensee, its parent, or an affiliate.	<p>Material typically in storage. Question need for immediate action. Consider for 2-5 day report.</p> <p>Locate or reference in Reports Section (Subpart D).</p> <p>Require submittal of report to Document Control Desk with copy to Regional Administrator</p>	<p><u>Agree</u>* But only extend reporting time to 24 hours.</p> <p><u>Agree</u>*</p> <p><u>Agree</u>*</p> <p>* Will consider during development of proposed rule responding to SRM dated 4/18/01 on SECY-01-0054, "Rulemaking Plan: 10 CFR Parts 72 and 73 - 'Conforming Requirements of Event Notification.'"</p>
72.74(a)	(1-hour report) Accidental criticality or loss of SNM	The loss portion of this regulation is redundant with 20.2201. Consider deleting loss portion.	<u>Disagree</u> Not endorsed based on safeguards considerations. Need to reconcile with 20.2201.
72.75(a)	(1-hour report) Declaration of an emergency as specified in the licensee's approved emergency plan		
72.75(b)(1)	(4-hour report) Event that prevents immediate protection actions necessary to avoid exposure to radiation or RAM or releases of licensed material that could exceed regulatory limits	"Prevents immediate protective actions" is vague and difficult to interpret. Consider deleting. Reporting emergency actions under 72.75(b)(4) is sufficient.	<u>Agree</u> Will be considered during current Part 72 rulemaking.
72.75(b)(2)	(4-hour report) A defect in any spent fuel storage structure, system, or component which is important to safety		
72.75(b)(3)	(4-hour report) A significant reduction in the effectiveness of any spent fuel confinement system during use.		
72.75(b)(4)	(4-hour report) An action taken in an emergency that departs from a condition or technical specification in a license or certificate of compliance when the action is immediately needed to protect public health and safety and no action consistent with the license or certificate of compliance is immediately apparent.		

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10 CFR	Reporting Requirement	WG Recommendation (blank=none)	Consensus of Cognizant Divisions/Offices
72.75(b)(5)	(4-hour report) An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.		
72.75(b)(6)	(4-hour report) An unplanned fire or explosion damaging license material or any device, container, or equipment containing licensed material		
72.75(c)(1)	(24-hour report) Unplanned contamination requiring access to be restricted for more than 24 hours (for reason other than decay of isotopes with half-lives < 24 hours).		
72.75(c)(2)	(24-hour report) Safety equipment is disabled or fails to function when it is required to be available and operable, and no redundant equipment is available and operable.		
72.242(d)	(30-day report) A design or fabrication deficiency, for any spent fuel storage cask which has been delivered to a licensee, when the design or fabrication deficiency affects the ability of structures, systems, and components important to safety to perform their intended safety function.	Inconsistent with 4-hour report required by 72.75(b)(2) for similar problem. Consider making reporting times consistent.	<u>Disagree</u> This represents a less immediate safety significant deviation than that in §72.75(b)(2).
Part 73 - Physical Protection of Plants and Materials			
73.26(i)(6)	(Immediate report) Failure to receive call at the movement control center from shipment or escort personnel (road shipment)	Locate or reference in Reports Section (73.70 series).	<u>Agree</u>
73.26(k)(4)	(Immediate report) Failure to receive call at the movement control center from shipment or escort personnel (rail shipment)	Locate or reference in Reports Section (73.70 series).	<u>Agree</u>
73.27(b)	(Immediate report) Lost or unaccounted for shipment of SSNM [made by licensee receiving formula quantities of strategic SNM]	Locate or reference in Reports Section (73.70 series).	<u>Agree</u>