

November 14, 1990

Note to Joe Mate, RES

From Michael Finkelstein, OGC

Re: OGC comments on the package finalizing the Notification of Incidents Rulemaking

Comments on Responses to Commenters dated October 9, 1990

There exist a sizable number of comments either without responses or with bracketed questions. All 76 comments should be satisfactorily answered.

Comment #14 is a valid question. What does "threatens to cause" and "threatens to prevent" mean? OGC expressed concern about these types of phrases at the proposed rule stage of the rulemaking. Comment #29 is correct. "threatens to prevent" is so vague that everyday events may qualify for reporting.

The response to comment #65 should be reworded. If we assumed the statement in the past and changed our minds than our response should be worded in that way. "NRC assumed that the licensed facility had provisions for.."

Superficial damage must be defined (comment #70). The definition should create a threshold in which the licensee knows that the damage is either superficial or significant and reportable. The delineated threshold for reporting damage must also be enforceable.

Comments on Notification Rule Amendments (Enclosure 3)

The following discussion of Part 30 amendments is equally valid for both Parts 40 & 70.

10 CFR Section 30.50 (b)(3): The parenthesis "(note the exemption for superficial injury has been deleted)" should be deleted.

10 CFR Section 30.50 (b)(4): Where is the bracket?  
Does the rule state that no report is required for superficial damage that does not affect the integrity of the licensed material or its container or does superficial damage stand alone and the example is one in which surface stains that do not affect integrity are exempt. If the latter is correct, I do not understand an exemption for surface stains on licensed material.

10 CFR Section 30.50 (c)(2): The word fulfill is missing the first "l."

10 CFR Section 30.50 (c)(3): This requirement is too vague to be enforceable. How will "threatens to cause" or "threatens to prevent" be determined? If an injury is immediate, it is impossible to have an event threaten to cause it. An immediate injury occurs immediately, not in the future. In addition, the term "immediate protective actions" is vague and needs to be defined.

Comments on Part 40 and Part 70 amendments parallel the above.



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

OCT 24 1990

MEMORANDUM FOR: Edward Baker III, Deputy Director, Office of Enforcement

Richard E. Cunningham, Director, Division of Industrial & Medical  
Nuclear Safety, Nuclear Material Safety and Safeguards

Thomas M. Novak, Director, Division of Safety Programs, Office  
for Analysis and Evaluation of Operational Data

Frank Congel, Director, Division of Radiation Protection and  
Emergency Preparedness, Office of Nuclear Reactor Regulation

Carlton C. Kammerer, Director, State Programs, Office of  
Governmental and Public Affairs

Stuart A. Treby, Assistant General Counsel for Rulemaking and  
Fuel Cycle, Office of the General Counsel

FROM: Sher Bahadur, Chief, Regulatory Development Branch, Division of  
Regulatory Applications, Office of Regulatory Research

SUBJECT: PUBLIC COMMENTS ON THE PROPOSED RULE, NOTIFICATION OF INCIDENTS

On May 14, 1990 NRC published in the Federal Register a notice of proposed rulemaking (55 FR 19890) to amend 10 CFR Parts 20, 30, 40, and 70 concerning the Notification of Incidents. This Federal Register Notice generated a response from 40 commenters. The comments from all commenters have been consolidated and are enclosed as Enclosure 1. Along with the comments are the proposed responses to most of the comments. Enclosure 2 contains a copy of the Federal Register Notice of May 14, 1990.

After evaluation of the comments, I believe that some modification of the proposed rule may be in order. Suggested changes to the rule as a result of the comments are contained in Enclosure 3 in comparative text.

Please review and comment on the public comments and the proposed responses. In those cases where a proposed response has not yet been developed, your suggestions on the appropriate wording is requested. With respect to the proposed rule, please review the suggested changes and provide your comments.

If you would like to obtain a copy of the actual letters received from the commenters, copies can be obtained from either Kevin Ramsey, NMSS (x20534) or Joe Mate, RES (x23795).

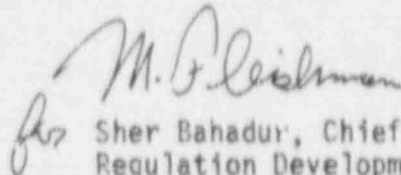
A meeting will be held on November 15, 1990, at 9:00 a.m. in room 10 B 13, One White Flint North, to discuss the staff's comments on the proposed responses and suggestions for finalizing the rule. Please provide the name and telephone number of the individual(s) from your office who will attend the meeting. Key personnel who worked on the development of the proposed rule include the following:

Ed Baker - OE, John Hickey and Kevin Ramsey - NMSS, Kathleen Black - AEOD, John Buchanan and Jim Wiggington - NRR, Joel Lubenau - GPA, and Mike Finkelstein - OGC.

Additional NMSS personnel who contributed to the proposed rule or who might be helpful in finalizing the rule include: Pat Vacca, Bruce Carrico, Josie Piccone, Steve Baggett, George Bidinger, Scott Pennington, Pete Loysen, and Ed Flack.

In order to expedite resolution of the rulemaking and meet our schedule commitments, I request that you complete your review and provide comments, suggestions, and identification of individual(s) who will attend the November 15 meeting by November 7, 1990.

If you have any questions regarding either this request or the meeting scheduled for November 15, please contact Joe Mate, PES, at x23795.

  
for Sher Bahadur, Chief  
Regulation Development Branch  
Division of Regulatory Applications

Enclosures:

1. Public Comments
2. Federal Register notice
3. FR Comparative text



Enclosure 1

October 9, 1990

General Comments

Comment

Commenter

1. Rule contains reporting requirements for extremely common events. It will lead to confusion and excessive reporting. The rule needs to be altered to exclude insignificant radiation events or significant events with insignificant radiation components. Licensees need clear cut definitions that specify severity levels requiring notification like those currently in 20.403 (a)(1) and (a)(2) and (b)(1) and (b)(2).

#1, #3,  
#12, #13,  
#14, #15,  
#20, #27,  
#33, #38  
#40

Response: We agree that there is a need to make the criteria in the proposed rule more specific. The revisions to the final rule reflect this intent to make the rule more specific relative to the criteria.

2. Modify the criteria in 20.403 to add specific notification criteria for fires, explosions, and off site medical treatment provided that these can be clearly separated from the insignificant events. Do not modify Parts 30, 40, and 70.

#4, #37  
#38

Response: In developing the revised criteria for the proposed rule the staff considered the possibility of revising Part 20 rather than establishing criteria in Parts 30, 40, and 70. To make such changes, however, would conflict with well established reporting requirements in Part 50 and would require the revision of these requirements. Therefore, the changes were made in Parts 30, 40, and 70.

3. Justification for rule is weak; writing new rules does not mean people will comply with them. Proposed rule provides no assurance of better reporting by licensees.

#5, #14  
#20, #33

Response: The staff agrees that writing new rules in itself provides no assurance that licensees will comply with them. In developing the proposed criteria, there was broad staff consensus that better criteria was needed to reduce confusion and disagreements over what types of events should be promptly reported to NRC. Although a few specific cases initiated the rulemaking effort, it was the general consensus that motivated the staff to redefine what types of events warranted prompt NRC notification.

4. Rule is prescriptive and eliminates need for licensee judgment. #5

Response: The staff does not feel that the revised rule is too prescriptive. NRC must consider and review events from all

types of licensees. Material licensees do not all consistently view events in the same manner as the staff. Hence, there is a need for a rule that is somewhat prescriptive yet leaves room for judgment on the part of the licensee.

5. Establish activity thresholds for each radionuclide that would require NRC notification such as Part 20 Appendix C. Define significant occurrences in terms of dose equivalents or concentration limits. Severity should be equivalent to the overexposure situations.

#5, #7  
#16, #18  
#33

Response: In developing the proposed rule the staff considered the idea of providing specific activity thresholds. However, the staff felt that such thresholds would be cumbersome and difficult to develop and use.

6. Deletions of paragraphs (a)(3), (a)(4), (b)(3), and (b)(4) are appropriate

#10, #13, #18  
#23, #25, #31  
#33, #37, #38

Most of the commenters agreed or voiced no disagreement that these criteria did not necessarily define events affecting public health and safety and that it was appropriate to delete them.

7. Place reporting requirements in individual licenses. Those with emergency plans already have sufficient requirements.

#10, #30

Response: If the NRC were to place individual reporting requirements in the individual licenses, this task would take a tremendous amount of time and effort to complete. There are more than 9,000 material licensees that fall under the purview of NRC. It would be difficult to maintain consistency with the reporting criteria specified in so many locations. The staff does not consider this to be a practical solution.

8. Proposed parts should be rewritten and reissued for a new comment period. Counterproductive to strong licensee programs.

#10, #14

Response:

9. Lack of communication with inspectors or other NRC staff. General information calls no longer taken in the afternoons. Enables misunderstandings and questions to become problems.

#12

Response: It is not NRC'S policy to refuse to take calls from licensees after 12:00 noon. Part of the function of NRC is to advise licensees concerning nuclear materials so that licensees do not violate regulations because of misunderstandings and or

questions. (Coordinate the response with Region III because the commenter was from Milwaukee, WI).

10. Did not consider alternatives - such as issuing notices to licensees, developing/amending regulatory guides, issuing license conditions, etc.

#21, #33

Response: NRC did consider alternatives such as those mentioned by the commenters. However, there was general agreement among the staff that certain regulations in 20.403 needed to be replaced with better reporting criteria. A rulemaking action is the only appropriate process to accomplish this action.

11. A parallel to power reactor licensees is not proper. Most material licensees have neither the inventory nor the stored energy to cause a loss like power reactor licensees.

#14, #20

Response: The staff did not intend to draw a parallel to power reactor licensees when Part 50 regulations were cited in the discussion. The staff was merely trying to point out where similar reporting requirements already existed in Part 50 in order to illustrate why Part 50 was not included in the rulemaking. We agree that material licensees do not have the inventory or the stored energy to cause a release similar to that which could be caused by a nuclear reactor incident. Although the hazard is less from material licensees, a potential hazard nevertheless exists.

12. In the case of nuclear medicine/nuclear pharmacy it is difficult to identify any events that would be significant enough to public health and safety to notify NRC immediately.

#15

Response:

13. Revised rule should be reviewed by NRC's Advisory Committee on Medical Uses of Isotopes.

#15

Response:

14. What does "threatens to cause" mean in 20.403?

#27

Response:

*? OAC expressed concern about this phrase at the proposed stage*

15. Further clarification needs to be provided associated with notification requirements for commercial nuclear power reactors. Companies holding a construction permit or operating license should be explicitly exempted for activities occurring within the protected area.

#22, #36  
#39

Response: The NRC does not intend for the proposed criteria to apply to commercial nuclear power plants. In the discussion as well as in the rule (Parts 30.50 (c)(3), 40.60 (c)(3), and 70.50 (c)(3)), the NRC specifically stated that the provisions do not apply to licensees subject to the notification requirements in Section 50.72.

16. NRC should provide clear guidance on their interpretation by circulating early event reports with comments on the appropriateness and by providing comparable early analysis of failures to report. #23, #33

Response: Please comment on the need for additional guidance (Nureg, Reg Guide).

17. NRC should more clearly define the notification requirements concerning the loss of packages of radioactive material. #25

Response: This rulemaking effort involves the notification requirements in 20.403. The loss of packages of radioactive material is covered by 20.402. The loss of radioactive material is outside the scope of this rulemaking effort. If licensees believe that the requirements in 20.402 should be revised, they should submit a petition for rulemaking.

18. Burden is estimated to be about 3 days for each notification required for large companies. #27

Response: The public reporting burden in the proposed rule was estimated at about four hours per response. This is an average considering both small and large licensees. We agree that a very large organization with several management levels could take a few days to complete and process such a report.

19. The subject rule and statement of considerations should make it clear that the rule would apply to uranium enrichment plants whether licensed under Part 70 or Part 76. Further, Part 50.72 and 50.73 should not apply to such facilities. #29, #30

Response: The question of whether or not enrichment plants should fall under Part 70 or Part 50 is not within the scope of this rule. Currently there are no licensed enrichment plants. The regulations that should govern these plants is a licensing issue that will be decided when a license is requested to operate an enrichment plant.

20. Immediate and 24 hour notifications should be limited to potentially serious events where it is necessary for NRC to intervene to mitigate the effects. #33, #38

Response: It is not the policy of the NRC to intervene when the licensee is having a problem. The problem is to be solved by the licensee. NRC monitors the licensee's actions, makes recommendations, and only intervenes if the licensee is unable or unwilling to take the necessary action to protect public health and safety or the environment. Whether or not the NRC intervenes, it must be aware of significant events to ensure that appropriate actions are taken.

21. We do not agree that the categorical exclusions have been met. The proposed regulation as written has a large impact and cannot be considered to be of a minor nature. #33

Response:

22. The NRC is trying to cover too many different types of licensees with one set of criteria. It would be better to establish separate criteria for each type of licensee (radiography licensees 10 CFR 34, medical licensees 10 CFR 35, etc.). #34

Response: (similar to #7)

23. Frequent use of the word "any" is not consistent with the stated intent of "significant occurrences". #38

Response: (Does the deletion of the word "any" reduce the effectiveness of the rule?)

24. Proposed rule should make it clear that it applies to Independent Spent fuel storage facilities. #29

Response: (Is there a need to have these requirements in Part 72)?

25. No reports should be required for events that are concluded before any meaningful communication with and participation by NRC is possible. #23

Response: The fact that the licensee has completed all necessary actions before NRC is notified is no reason not to file a report. There may still be some action that NRC may have to take depending on the the nature of the incident. (i.e. warning other licensees of generic problems).

26. Provide further explanation and possibly examples of what securing the material and assessing releases means. (Used in the discussion). #38



Response:

### Comments on the Actual Rule

#### 30.50 Notification Requirements.

##### 30.50a Immediate Notification.

27. Require one hour notification of NRC and States for incidents with substantial potential for injury to off site people. Suggest 5 min for one hour notification. #2

Response: There are already regulations that require emergency response plans (including special notification requirements) for those licensees that have enough licensed material to cause significant doses offsite. (i.e. 30.32i, 40.31j, and 70.22i).

28. Use the language in the supplementary information (p. 19891-column 1) in order to avoid numerous additional reporting events. Wording would be: Immediate notification is required only if events or conditions involving licensed material threaten an immediate disabling injury or threaten to prevent immediate protective actions necessary to protect the public health or the environment. #13, #19

Response: The staff concurs with the suggestion and it has been incorporated into the final rule. See 30.50 (c)(3), 40.60 (c)(3), and 70.50 (c)(3).

29. "Threatens to prevent" is so vague that everyday events may qualify for reporting. #14, #40

*OGC agrees with this comment*

Response:

30. Guidance is needed concerning reports to be made by licensees when radiographers' pocket dosimeter is discharged beyond its range. #16

Response:

31. The time requirement may be severe and unrealistic in some cases. #24

Response: The staff does not agree that the time requirements are severe and unrealistic. Licensees should be able to perform an initial evaluation of an event and notify the NRC within the 4 or 24 hour time limits. If an event does not clearly fall outside of



the notification requirements, the licensee must be conservative and report the event.

32. What is meant by "immediate protective actions"? Define. #33

Response:

33. What is meant by "an event" and "necessary"? Definitions for these and other terms should be provided. #35

Response:

34. Question the need to immediately report events regardless of quantity and type of licensed material involved. #34

Response: The quantity and type of material will determine if immediate protective actions are necessary to protect the health and safety of the workers or the public. Events involving small quantities of material requiring no immediate protective actions would not be reportable. The quantity and type of licensed material is a factor to be included in the licensee's evaluation of an event.

35. Do toxic gas releases include gas releases (such as UF-6, NOx, hydrogen fluoride, etc.) that periodically occur but are contained and controlled by operating procedures need to be reported? #38

Response: Gas releases do not have to be reported provided they do not prevent or threaten to prevent protective action from being taken.

#### 30.50b Twenty-four hour Notification

36. Licensees should not be penalized for failing to report within 24 hours if a reasonable estimate projects that access would not be lost for more than 24 hours. #23

Response: If an event does not clearly meet the notification criteria, but the licensee can not conclusively rule out the need to report the event, a conservative approach must be taken by notifying the NRC within 24 hours.

#### 30.50(b)(1) Contamination

37. Minor contamination (such as a contaminated collimator or a spill of short lived radionuclide) is common in research and #1, #5, #8, #10.

medical settings. Access restricted in interest of ALARA and efficiency and to minimize dose. Spills of this nature should not have to be reported. Requirement appears excessive and not related to any potential hazard to the public or the environment.

#18, #21,  
#22, #25,  
#33, #34,  
#37, #38,  
#39, #40

Response: The staff agrees that restricting access to allow short-lived isotopes to decay should not be a reportable event. The regulation has been revised to exempt reports of areas restricted to allow isotopes with a half-life of less than 24 hours to decay.

38. How do you determine when an area is "cleaned up"? Is the definition of an "area" limited to any minimum size?

#5

Response:

39. What does a "contamination event that restricts access" mean?

#8

Response:

40. Area is unduly restrictive. Makes no distinction about the source of contamination or efforts to remove it. For hospitals either restrict the definition of contamination event, exclude contamination from contaminated patients, or exclude temporal extensions of restricted areas beyond what would normally be necessary allowing a more deliberate pace of decontamination.

#11, #26  
#31

Response:

41. Places unnecessary burden on the licensee with restricted areas. Low action levels for contamination/whole body exposures are low because clean-up efforts can be supplemented with radioactive decay. Hence individual and collective radiation exposures may increase.

#12, #13

Response:

42. Requirement to notify NRC within 24 hours needs to be more quantitative. Specific levels of contamination should be stated.

#20, #25  
#33

Response:

43. In the second sentence of the supplementary information under contamination events on page 19891 (column 2) delete the words, "normally present" and insert words "specified in 10 CFR 20.405".

#29

Response:

44. Sentence 2 of paragraph 1 in the discussion under Contamination Events states that the "requirement is intended to cover events that cause accidental contamination in excess of radiological conditions normally present". This standard is markedly lower than the proposed standard and is inappropriate. #30

Response:

45. Rule should allow for planned activities such as maintenance or decommissioning that would result in restricting access. #19, #34

Response: Agree. This criteria has been revised to clarify that it applies to accidental contamination only.

46. It is not clear from the rule that restriction of access includes changing protocols such as adopting extra protective clothing. Need to provide more guidance. #33

Response:

47. Allow licensees to have contaminated restricted areas in excess of 24 hours provided employees are not exposed to exposures in excess of the regulatory limits and no releases are being made to unrestricted areas or the environment. #34

Response:

48. Change the time for loss of access from more than 24 hours to more than one working day. #40

Response: Disagree. A definitive time period is necessary.

### 30.50(b)(2) Equipment

49. Wording is not clear. Use the last paragraph on page 19891 (column 3) of the Federal Register Notice. #4

Response: Please comment on the advisability of creating three subsections in 30.50 (b)(2) based on the paragraph cited in the discussion.

50. Events should not be reported unless they result in exceeding some existing limits (spillage of a few grams of natural uranium from crack in a pipe valve or drum). Either specify some limits #13, #14, #22, #32, #39

or drop the requirement.

Response:

52. Delete the word "needed" at the end of the first sentence of 30.50 (b)(2) and replace it with the phrase "required to be available and operable". #17

Response: The criteria has been reworded in the final rule.

52. As currently written this section . . . result in large numbers of reports on the malfunction of such equipment as portable survey instruments, respirators, fire extinguishers, or even flashlights. #19

Response: Equipment that is covered by the rule must be necessary for one of the safety functions specified. In other words it must be needed to: (1) prevent uncontrolled releases of material, (2) prevent overexposures to radiation, or (3) mitigate the consequences of an accident. In addition, a notification is only required when such equipment is disabled or fails when it is needed. Malfunctions detected, when the equipment is not needed for one of the specified safety functions, are not reportable under this rule. Although large numbers of reports are possible, the staff does not believe that an excessive number of reports will be generated.

53. Determinations by licensees about whether equipment failures are reportable should be limited to realistic scenarios in order to avoid a significant number of unnecessary reports. #23

Response: Agree. Licensees should be realistic when they evaluate whether the function or the availability of the function of safety equipment was needed when it failed.

54. The third example on page 19892 concerning radiography equipment conflicts with the notification requirements in 30.34. #25

Response:

55. Strict interpretation of the rule indicates that every stuck shutter requires a 24 hour report. We fail to see the need to report if the exposure limits are not exceeded. #28

Response:

56. Specify what is meant by the word "needed" and what severity #33, #38



or potential event does the equipment protect against?

Response:

57. What is meant by "uncontrolled releases of radioactive material"? #38

Response:

58. What is meant by the words "prevent exposure to radiation and mitigate the consequences of an accident"? #38

Response:

59. The use of the word "automatically" is confusing and should be deleted. Change the last sentence to read "if redundant equipment which performs the required function is operative". #38

Response: Disagree. Operative equipment only replaces inoperative equipment if it is used. If the operative redundant equipment does not go into service automatically, the safety function will be lost for some undetermined period of time.

60. Equipment failures reported under 34.30 should be exempt from this requirement since most incidents regarding radiography equipment failure are detected and resolved by the licensee usually within 24 hours. #40

Response:

### 30.50(b)(3) Medical Treatment

61. The degree of personal injury has no bearing on the potential of the radiation hazard and may result in reporting many incidents of no significance to NRC. A laceration to a lab workers hand may require sutures where the radiation component may be insignificant. Current rule would require the reporting of an event even if the medical treatment was not related to the contamination issue. #1, #15 #27, #37

Response: NRC is concerned about the spread of contamination at the medical facility and the possible exposure of the general public to radiation and radioactive contamination. In addition, there is always the possibility that radiation may complicate the injury.

62. Notification should only be required if contamination of the individual or treating medical facility exceeds NRC regulatory limit, license limit, or NRC unrestricted release limit. #13

Response: NRC feels that exposures of the general public (including medical workers) to dispersible contamination should be ALARA.

63. What is a radioactively contaminated individual? Need a threshold dose or contamination level criteria.

#14, #27,  
#33

Response: A radioactively contaminated individual is a person who has loose surface contamination on their clothing or on their body that can be spread to other individuals. This rule does not cover internal contamination from medical treatment or some other source.

64. Change the word "rendered" in the last sentence to the word "required".

#20

Response: NRC is concerned about what was actually done to the contaminated individual. The fact that the treatment may not have been required does not eliminate the radiation hazard. This statement has been deleted from the final rule (see comment #65 below).

65. No notice is required for the treatment of a superficial injury at a licensee-maintained medical facility but is required for treatment of the same injury elsewhere. Why?

#23, #33

Response: NRC assumed that the licensee facility has provisions for controlling the spread of contamination. This statement has been deleted and will now require all medical facilities whether licensee-owned or not to report because it is not wise to assume that the facility has contamination control provisions when it has not been verified.

*Did we assume  
in the past  
and have changed  
our mind  
should be  
worded that  
way*

66. In addition to first aid for a superficial injury, there are other incidents of medical treatment that should not be reported (Note contact with the commenter failed to provide examples of what this other type of treatment might be).

#24

Response:

67. We have incorporated and maintained appropriate emergency plans, personnel training, and decontamination facilities at a local hospital to specifically cope with medical treatment. Would this be considered a licensee maintained facility?

#38

Response: If the contamination controls are in place as the commenter suggests, NRC could exempt treatment of a contaminated

individual at the facility from the reporting requirements. Please comment on whether we should allow an exemption for any facility that has established contamination control procedures.

### 30.50(b)(4) Fire or Explosion

68. The most common type of explosion in medical, biomedical research, and radiopharmaceutical operations is screwcap vials or stoppered test tubes containing tissue samples with only traces of radionuclides. Do these types of explosions have to be reported? #1

Response: When the proposed rule was drafted, NRC did not intend to include small vials and stoppered test tubes as explosions. Please comment on whether these types of explosions should be excluded from the final rule.

69. In the case of fires, the hazard of the fire may greatly outweigh the hazards of release. Need quantitative threshold limits for licensees. #1, #15, #20, #33, #37

Response: We agree that the fire usually poses the greatest hazard. However, if radioactive material is involved, NRC needs to insure that appropriate controls are used during firefighting and cleanup operations. Because radiation hazards vary, a table of activity thresholds would be difficult to develop and use. The staff does not believe that there are a large number of fires and explosions involving radioactive material and therefore a large number of reports should not be generated.

70. A report should not be required if there is only superficial damage to licensed materials. #23

Response: Tend to agree. Please comment on how superficial damage should be defined.

*Superficial damage must be defined*

71. Paragraphs 2, 3, and 4 on page 19891, column 2, regarding fires are not clear. There is normally some delay in responding to an emergency. NRC should define the length of the delay that is reportable. #33

Response: A normal delay in responding to an event would not be reportable such as the time to drive to the site or the time to call the fire dept. However, once the responders are available and able to do the job, any additional delay would be reportable.

72. Retain a significant dollar figure in the range of \$10,000 for property damage. #38



Response: A dollar figure regardless of amount is not necessarily indicative of the hazard to the public health and safety.

### 30.50(c) Reports

73. Licensee duplication of written reports prepared by NRC inspectors does not appear to be justified. #13

Response: There is a need for licensees to document the results of their investigation when a problem occurs. Not all incidents are investigated by NRC. Additionally when NRC does investigate an incident, its review of the details may lead to a different conclusion than that of the licensee. Licensee reports would be useful in determining what corrective actions may be needed, if any, to preclude the incident from reoccurring. #13

74. Personnel radiation exposure data may at times be difficult to obtain. #24

Response: NRC recognizes that there may be times when it is difficult to obtain radiation exposure data. Only data that is available is required to be reported.

### 40.60(b)(3) Medical Treatment.

75. Change the word "significant" in the 6th line of the Federal Register Notice (P19894) column 3 (40.60(b)(3) to "superficial". #40

Response: Agree

76. The following nuclear criticality safety events should be included in the rule as reportable events: #27

- a. Unintended accumulation of SNM in an unfavorable geometry system.
- b. Failure of an SNM concentration monitoring instrument or a failure of a moisture detection instrument.

Response:

In the Federal Register Notice concerning this proposed regulation NRC asked prospective commenters to provide input on the number of reports that might be generated yearly. The table below summarizes the comments responding to this question.

Estimates of Additional Reports as a Result of Proposed Rule

No additional reports	#4
Some additional reports (10 or less)	#10
Several additional reports (11 to 24)	#12, #21, #27
Significantly more reports (more than 25)	#3, #13, #18, #20, #22, #33, #38

Note:

Nine commenters stated that 11 or more additional reports would be generated as a result of the proposed rule. Commenter #38 estimated that about 100 additional reports would have been filed had the rule been in effect in 1989.

Enclosure 2

2. The rationale for excluding such products; and

3. The scientific basis, including any supporting microbiological data, quality control procedures, and the like for concluding such products are not a public health concern.

The preamble to any proposed regulations which might be issued would include a discussion of the comments received in response to this Notice.

Done at Washington, DC, on: May 9, 1990.

Lester M. Crawford,

*Administrator, Food Safety and Inspection Service.*

[FR Doc. 90-11142 Filed 5-11-90; 8:45 am]

BILLING CODE 3410-01-M

## NUCLEAR REGULATORY COMMISSION

10 CFR Parts 20, 30, 40, and 70

RIN 3150-AC91

### Notifications of Incidents

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Proposed rule.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) proposes to amend its regulations to revise licensee reporting requirements regarding the notifications of incidents related to radiation safety. This action is needed to ensure that significant occurrences at material licensee facilities are promptly reported to NRC so that the Commission can evaluate whether the licensee has taken the action required to protect the public health and safety and whether generic safety concerns are identified that may require prompt NRC action.

**DATES:** The comment period expires July 30, 1990. Comments received after this date will be considered if it is practical to do so, but the staff is able to ensure consideration only for comments received on or before this date.

**ADDRESSES:** Mail written comments to the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch. Comments may be delivered to One White Flint North, comments received on the proposed rule, may be examined at the NRC Public Document Room, 2120 L Street NW (Lower Level), Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Joseph J. Mate, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-3795.

### SUPPLEMENTARY INFORMATION: Background

Current regulations require that NRC licensees promptly report certain events involving by-product, source, or special nuclear material that cause or threaten to cause the exposure of the whole body to specific levels of radiation, the release of radioactive material in specific concentrations, the loss of use of facilities for a specific duration, or damage to property in excess of a specific dollar amount. The events are to be reported either immediately or within 24 hours, depending on the nature and severity of the event as defined in § 20.403. NRC has become concerned that certain provisions of § 20.403 need to be revised because licensees have not been reporting certain significant events. Two examples of events that were not reported are shown below. In both cases, the licensee was cited for violations.

In one case, a fire destroyed a material licensee's building that contained the licensee's moisture density gauge. Damage caused by the fire rendered the gauge unusable, although no radioactive material was released. NRC was not notified of the fire. As a result, a potentially significant event was not promptly evaluated by NRC to determine whether the damaged gauge might present a hazard to public health and safety.

In a second case at a licensee's site, a uranium hexafluoride cylinder bulged but did not rupture. The event was not reported to NRC. Again, this meant that NRC was not able to promptly evaluate the potential hazard associated with the incident. After this incident, a uranium hexafluoride cylinder in a similar situation at another licensee's site did rupture, causing one death and several injuries.

### Discussion

The existing reporting requirements in 10 CFR 20.403 are general. The NRC staff has examined the provisions of § 20.403 and decided that revisions are appropriate to better describe reportable events having significant implications for public health and safety. The rule would be a matter of compatibility for the Agreement States. The Agreement States participated in the development of this rule, and their comments were incorporated as appropriate. In final form, this rule would amend the major revision to part 20 currently under consideration by the Commission (51 FR 1092; January 1, 1986).

Paragraphs (a)(3), (a)(4), (b)(3), and (b)(4) of § 20.403 that deal with loss of operation and damage to property

would be deleted because the staff believes these criteria are not the best way to describe events that pose a hazard to public health and safety or the environment. For example, the periodic loss of operation of a facility is not necessarily related to any potential hazard to the public or environment. The same is true for the cost of repairing damage, which may be high for reasons unrelated to any potential radiation hazard associated with licensed material. The deleted sections are being replaced with new criteria that will be added to parts 30, 40, and 70. Criteria for nuclear power reactors are already contained in § 51.72 of 10 CFR part 50. The staff believes the new requirements to be added to parts 30, 40, and 70 will be more indicative of potentially significant events affecting the health and safety of the public and the environment.

The intent of these amendments is to require prompt notification (either immediately or within 24 hours) to the NRC of events that would require prompt action by the NRC to protect public health and safety or the environment. Prompt NRC actions may include evaluating the potential hazards and corrective actions being taken by the licensee, issuing immediate warnings of generic hazards to other licensees and appropriate organizations, activating the NRC incident response center, or dispatching a response team to the site of the event.

The NRC specifically requests public comments on (1) The appropriateness of these amendments, (2) the number of reports that licensees expect might be generated yearly, (3) how to minimize reports of events that do not require a prompt NRC response without excluding any events that do require prompt NRC actions, and (4) events that would require prompt NRC actions but are not covered under the proposed amendments, and how to include these events in the notification requirements.

The proposed amendments for parts 30, 40, and 70 are identical. The discussion that follows is, therefore, organized by the type of requirement rather than by the part of the regulation where it is found. The proposed amendments do not apply to activities reportable under 10 CFR part 50. The proposed amendments do apply to commercial power reactor licensees for activities licensed under parts 30, 40, and 70. Since the notification requirements under 10 CFR part 50 do not apply to research and test reactors, the proposed amendments also apply to such reactors possessing material licensed under parts 30, 40, and 70.



### Immediate Notification

A period of 4 hours would be the maximum time allowed for "immediate notification" by material licensees. It is intended that licensees will notify the NRC of incidents as soon as possible, but in no case later than 4 hours after discovery. This is consistent with some of the immediate reporting requirements specified in § 50.72 for power reactors. Four hours was used because many smaller material licensees do not have the capability to quickly assess and respond to events that reactor licensees possess and because the degree of hazard posed by nonreactor events is typically much smaller than the hazard posed by reactor events.

### Control of Licensed Material

The primary responsibility for controlling licensed material and using it safely rests with the licensee. It is important that the NRC immediately receive reports of events that prevent or threaten to prevent the licensee from performing safety-related duties necessary to maintain control of licensed material and protect the public. A reporting requirement for these types of events would be included. A similar requirement is currently specified in 10 CFR 50.72(b)(1)(vi) for reactor licensees.

Licensees will need to exercise some judgement in determining when events require an immediate NRC notification. After an event has been discovered, the licensee must determine what immediate actions are necessary to maintain and verify control of any licensed material involved. An immediate NRC notification would be required if (1) the event prevented the licensee from performing any of those actions, or (2) the event created a condition that could have prevented any of those actions. In either case, an immediate report is required regardless of the duration of the incident that prevented the licensee from performing the appropriate actions.

For example, an immediate NRC notification would be required if a filled uranium hexafluoride cylinder bulged or a containment showed signs of failing in a way that would injure individuals in the area and prevent immediate actions necessary to maintain and verify control of licensed material. The NRC must be aware of such a potential hazard so it can assure that appropriate actions are taken.

Immediate notification is required only if events or conditions involving licensed material threaten an immediate disabling injury or threaten to prevent immediate protective actions necessary to protect the public or the environment.

For example, immediate NRC notification is not required if crumbling insulation is exposing licensee personnel to airborne asbestos fibers. Although the condition threatens the health of the workers, it does not threaten an immediate disabling injury or threaten to prevent immediate actions necessary to maintain and verify control of the licensed material.

In the event of a fire involving licensed material, an immediate NRC notification would be required if workers could not secure the licensed material or assess releases because of the fire. An immediate notification would also be required if firefighters could not enter the area to combat the fire because of high radiation levels or other radiological hazards. If all immediate actions necessary to control the licensed material and extinguish the fire were performed but the licensed material or its container was still damaged, a 24-hour notification would be required by the proposed reporting requirement for fires and explosions.

In the event of an explosion involving licensed material, an immediate notification would be required if the resulting damage prevented workers from securing the licensed material or assessing releases. If all immediate actions necessary to control the licensed material were performed but the material or its container was still damaged, a 24-hour notification would be required by the proposed reporting requirement for fires and explosions.

An immediate notification would also be required if a tornado or other natural phenomenon caused damage that prevented workers from performing immediate actions necessary to control licensed material and verify whether any releases had occurred.

### Contamination Events

A new requirement would be added for licensees to report contamination events if access to an area must be restricted for more than 24 hours because of the contamination. This requirement is intended to cover events that cause accidental contamination in excess of the radiological conditions normally present. If the accidental contamination is not cleaned up in a timely manner, personnel entering the area may receive unnecessary radiation exposure and may spread contamination to themselves, others, or other areas.

This requirement is applicable to both unrestricted areas and restricted areas where additional restrictions are imposed. For example, a radioactive waste container storage area is normally locked and restricted. If a spill contaminated the floor for more than 24

hours and required workers entering the area to wear additional anti-contamination clothing, NRC notification within 24 hours would be required.

Another example is a spill of a liquid containing technetium-99m in a nuclear pharmacy. To minimize the dose to workers cleaning up the spill, areas contaminated with technetium-99m are typically isolated for a short time to allow the technetium to decay. Technetium-99m has a half-life of 6 hours. If the area must be isolated for more than 24 hours, a 24-hour NRC notification would be required. It is important that NRC receive notification of such events because prompt NRC action may be necessary to ensure that the contamination and cleanup activities are performed in a timely manner. Moreover, if the contamination cannot be cleaned up within 24 hours, the matter may be significant and require prompt NRC on-site presence.

### Safety Equipment Related Events

A reporting requirement would be added for licensees to report within 24 hours events in which equipment necessary to prevent uncontrolled releases of radioactive material, to prevent overexposures to radiation, or to mitigate the consequences of an accident is disabled or fails to function as designed when it is needed. This reporting requirement includes equipment failure, equipment damage, and procedural errors which cause equipment to fail or be disabled. NRC must be aware of these events to identify potential safety hazards and to ensure that the licensee takes appropriate actions to protect workers and the public. A similar requirement is currently specified in 10 CFR 50.72(b)(2)(iii) for reactor licensees.

Licensees will need to exercise some judgement in determining when an event requires a 24-hour NRC notification. First, the licensee must determine whether the inoperable equipment was needed to prevent uncontrolled releases, overexposures, or mitigate the consequences of an accident. Second, the licensee must determine whether the function of the equipment—or the availability of the function—was needed when the equipment was disabled or failed to function. A 24-hour notification is not required if neither the function nor its availability was needed when the equipment was inoperable. Third, if the inoperable equipment was an individual component, the licensee must determine whether redundant equipment was operable and available to automatically perform the required function.

The following are examples of reportable events:

1. A malfunctioning interlock on an irradiator chamber door. If the interlock fails, the door could be opened while a source containing several thousand curies is exposed, resulting in a person receiving a large radiation dose in a very short time. Prompt NRC action may be necessary to warn other licensees of generic safety problems or to ensure the licensee specifies adequate controls to protect occupational workers and the public.

2. Failure of a high efficiency particulate air (HEPA) filter in the ventilation system of a fuel fabrication plant. HEPA filters are used to prevent uncontrolled releases of uranium particles when uranium powder is processed to make reactor fuel. If workers discover that a filter had a hole in it while uranium powder was being processed, a 24-hour NRC notification would be required. The NRC must be aware of this event to ensure that the licensee takes appropriate actions to determine if a release occurred or to independently verify that action is sufficient to protect the public health and safety.

3. Failure of radiography equipment necessary to retract and lock the source in its safe, shielded position. If a radiography source cannot be retracted and locked in its camera, prompt NRC action would be needed to ensure that appropriate steps are taken by the licensee to recover and secure the source.

4. Damage to the shielding in a gauge that exposes the radiation source or that prevents an exposed source from being reshielded. Many nuclear gauges are authorized for use in non-nuclear industries because the sources are well shielded and extensive radiation exposure controls are not required. If a gauge source is left unshielded, prompt NRC action would be needed to ensure that appropriate steps are taken by the licensee to control radiation exposure, reshield the source, and secure the gauge.

5. Failure of a teletherapy timer during treatment. Teletherapy units used to deliver large doses of radiation to cancer patients have timers that automatically close the unit's shutter—stopping the radiation exposure—after a prescribed treatment is completed. Teletherapy units contain radiation sources that deliver large doses in a short time. If a teletherapy timer failed to automatically close the shutter when required, the attending technician would have to manually activate an electrical backup or mechanical mechanism to close the shutter. Since no redundant

equipment is available to automatically close the shutter, a 24-hour NRC notification of a teletherapy timer failure would be required. This would permit prompt NRC action to ensure that the licensee takes appropriate steps to investigate why the timer failed. It might even be necessary for NRC to warn other licensees of teletherapy units if a generic problem was discovered.

#### Personal Injury Events

A requirement would be added for licensees to report within 24 hours events that require medical treatment of a radioactively contaminated individual at a medical facility. These events are highly significant because they may (1) indicate safety problems in a licensed operation, (2) risk internal contamination through open wounds, and (3) expose medical personnel to radiation and contamination. A similar requirement is currently specified in 10 CFR 50.72(b)(2)(v). To ensure that any event of this type occurring at a medical facility is reported, this requirement does not stipulate transporting the injured individual as requisite. However, to avoid numerous reports of insignificant events such as a medical technician puncturing a hand with a syringe containing a radiopharmaceutical, a note is added to clarify that a 24-hour notification is not required if first aid for a superficial injury at a licensee-maintained medical facility is the only treatment rendered.

#### Fires and Explosions

A new requirement would be added to report within 24 hours all fires and explosions damaging licensed material or any device, container, or equipment containing licensed material. These events must be evaluated promptly to minimize any spread of contamination and to determine the performance of shielding and other features designed to control licensed material. Fires or explosions damaging licensed material are of particular significance because they can cause material in sealed sources to be released, generate airborne radioactive contamination, and generate contaminated runoff from water used to extinguish fires. A second notification is not required if an immediate notification was made for a fire or explosion (see the discussion above for Control of Licensed Material).

#### Written Reports

The proposed rule would require a written report within 30 days of any immediate or 24-hour notification similar to the written report currently required by § 20.405. Written reports prepared pursuant to other regulations

may be submitted to fulfill this requirement if the report contains all of the necessary information and the appropriate distribution is made.

#### Environmental Impact: Categorical Exclusion

The NRC has determined that this final rule is the type of action described in categorical exclusion in 10 CFR 51.22(c)(2). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this proposed regulation.

#### Paperwork Reduction Act Statement

The proposed rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*). This proposed rule has been submitted to the Office of Management and Budget for review and approval of the paperwork requirements.

Public reporting burden for this collection of information is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (MNBB-7714), U.S. Nuclear Regulatory Commission, Washington, DC 20555; and to the Paperwork Reduction Project (3150-0014, 3150-0017, 3150-0020, and 3150-0009), Office of Management and Budget, Washington, DC 20503.

#### Regulatory Analysis

The Commission has prepared a draft regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The draft analysis is available for inspection in the NRC Public Document Room, 2120 L Street NW (Lower Level), Washington, DC. Single copies of the draft analysis may be obtained from Joseph J. Mate, telephone (301) 492-3795. The Commission requests public comments on the draft regulatory analysis. Comments on the draft analysis may be submitted to the NRC as indicated under the ADDRESSES heading.

#### Regulatory Flexibility Certification

Based on the information available at this stage of the rulemaking proceeding and in accordance with the Regulatory Flexibility Act, 5 U.S.C. 605(b), the



Commission certifies that, if promulgated, this rule will not have a significant economic impact on a substantial number of small entities. The proposed rule affects approximately 9,100 licensees monitored by NRC under 10 CFR parts 20, 40, and 70. The licenses are issued to academic institutions, medical institutions, and industrial entities. The proposed rule is being issued in order to reduce misunderstandings by material licensees and to clarify the types of events that must be reported to NRC. No report would be required of licensees unless there is an incident involving licensed material that meets the requirements specified in the proposed amendments. Since the revised reporting requirements are essentially the same as the current reporting requirements, the impact on licensees should be minimal.

#### Backfit Analysis

The NRC has determined that the backfit rule, 10 CFR 50.109, does not apply to this proposed rule and therefore a backfit analysis is not required because the amendments that apply to power reactors (deletion of 10 CFR 20.403 (a)(3), (a)(4), (b)(3), and (b)(4)) involve only a relaxation of requirements.

#### List of Subjects

##### 10 CFR Part 20

Byproduct material, Licensed material, Nuclear materials, Nuclear power plants and reactors, Occupational safety and health, Packaging and containers, Penalty, Radiation protection, Reporting and recordkeeping requirements, Special nuclear material, Source material, Waste treatment and disposal.

##### 10 CFR Part 30

Byproduct material, Government contracts, Intergovernmental relations, Isotopes, Nuclear materials, Penalty, Radiation protection, Reporting and recordkeeping requirements.

##### 10 CFR Part 40

Government contracts, Hazardous materials-transportation, Nuclear materials, Penalty, Reporting and recordkeeping requirements, Source material, Uranium.

##### 10 CFR Part 70

Hazardous materials-transportation, Nuclear materials, Packaging and containers, Penalty, Radiation protection, Reporting and recordkeeping requirements, Scientific equipment, Security measures, Special nuclear material.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and 5 U.S.C. 553, the NRC is proposing to adopt the following amendments to 10 CFR parts 20, 30, 40, and 70.

#### PART 20—STANDARDS FOR PROTECTION AGAINST RADIATION

1. The authority citation for part 20 continues to read as follows:

Authority: Secs. 53, 63, 65, 81, 103, 104, 161, 68 Stat. 930, 933, 935, 936, 937, 946, as amended (42 U.S.C. 2073, 2093, 2095, 2111, 2133, 2134, 2201); Secs. 201, as amended, 202, 206, 68 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 20.406 also issued under secs. 135, 141, Public Law 97-425, 98 Stat. 2232, 2241 (42 U.S.C. 10155, 10161).

For the purposes of sec. 223, 68 Stat. 956, as amended (42 U.S.C. 2273); §§ 20.101, 20.102, 20.103 (a), (b), and (f), 20.104 (a) and (b), 20.105(b), 20.106(a), 20.201, 20.202(a), 20.203, 20.207, 20.301, 20.303, 20.304, and 20.305 are issued under sec. 161b, 68 Stat. 946, as amended (42 U.S.C. 2201(b)); and §§ 20.102, 20.103(e), 20.401-20.407, 20.408(b), and 20.409 are issued under sec. 161a, 68 Stat. 950, as amended (42 U.S.C. 2201(a)).

##### § 20.403 [Amended]

2. In § 20.403, the semicolon and the word "or" following paragraph (a)(2) are removed and a period is inserted, and the semicolon and the word "or" following paragraph (b)(2) are removed and a period is inserted, and paragraphs (a)(3), (a)(4), (b)(3), and (b)(4) are removed.

#### PART 30—RULE OF GENERAL APPLICABILITY TO DOMESTIC LICENSING OF BYPRODUCT MATERIAL

3. The authority citation for part 30 is revised to read as follows:

Authority: Sec. 51, 82 Stat. 102, 103, 186, 68 Stat. 935, 946, 953, 954, 955, as amended, Sec. 234, 63 Stat. 444, as amended (42 U.S.C. 2111, 1112, 2201, 2232, 2233, 2236, 2282); Secs. 201, as amended, 202, 206, 68 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 30.7 also issued under Pub. L. 95-601, Sec. 10, 92 Stat. 2651 (42 U.S.C. 5851). Section 30.34(b) also issued under Sec. 164, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 30.51 also issued under Sec. 187, 66 Stat. 955 (42 U.S.C. 2237).

For the purposes of Sec. 223, 68 Stat. 956, as amended (42 U.S.C. 2273); §§ 30.3, 30.34 (b) (c) and (f), and 30.41(a) and (c), and 30.53 are issued under Sec. 161b, 68 Stat. 946, as amended (42 U.S.C. 2201(b)); and §§ 30.6, 30.9, 30.36, 30.50, 30.51, 30.52, 30.55, and 30.56(b) and (c) are issued under Sec. 161a, 68 Stat. 950, as amended (42 U.S.C. 2201(a)).

##### § 30.8 [Amended]

4. In § 30.8 paragraph (b) is revised to read as follows:

§ 30.8 Information collection requirements: OMB approval.

(b) The approved information collection requirements contained in this part appear in §§ 30.15, 30.19, 30.20, 30.32, 30.34, 30.36, 30.37, 30.38, 30.50, 30.51, 30.55, and 30.56.

5. A new § 30.50 under Records, Inspections, Tests, and Reports is added to read as follows:

##### § 30.50 Notification requirements.

(a) *Immediate notification.* Each licensee shall notify the NRC as soon as possible but not later than 4 hours after the discovery of any event involving licensed material that prevents or threaten to prevent immediate protective actions necessary to maintain and verify control of licensed material (includes fires, explosions, toxic gas releases, etc.).

(b) *Twenty-four hour notification.* Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:

(1) Any contamination event that restricts access to the contaminated area by workers or the public for more than 24 hours.

(2) Any event in which equipment necessary to prevent uncontrolled releases of radioactive material, or to prevent over exposures to radiation, or to mitigate the consequences of an accident, is disabled or fails to function as designed when it is needed. Notification is not required when an individual component is disabled or fails to function if redundant equipment is operable and available to automatically perform the required function.

(3) Any event that requires medical treatment of a radioactively contaminated individual at a medical facility. Notification is not required if first aid at a licensee-maintained medical facility for a superficial injury is the only treatment rendered.

(4) Any fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material.

(c) *Preparation and submission of reports.* Reports filed with the NRC pursuant to this section must have the names of persons who have received exposure to radiation stated in a separate part of the report. Reports made by licensees in response to the



requirements of this section must be made as follows:

(1) Licensees shall make reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center.<sup>3</sup> To the extent that the information is available at the time of notification, the information provided in these reports must include:

- (i) The caller's name and call back telephone number;
- (ii) A description of the event, including date and time;
- (iii) The exact location of the event;
- (iv) The isotopes, quantities, and chemical and physical form of the licensed material involved; and
- (v) Any personnel radiation exposure data available.

(2) Written report. Each licensee who makes a report required by paragraph (a) or (b) of this section shall submit a written follow-up report within 30 days of the initial report. These written reports must be sent to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, with a copy to the appropriate NRC Regional office listed in Appendix D of 10 CFR part 20. The reports must include the following—

- (i) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
- (ii) The exact location of the event;
- (iii) The isotopes, quantities, and chemical and physical form of the licensed material involved;
- (iv) Date and time of the event;
- (v) Corrective actions taken or planned and the results of any evaluations or assessments; and
- (vi) The extent of exposure of individuals to radiation or to radioactive materials.

(3) The provisions of § 30.50 do not apply to licensees subject to the notification requirements in § 50.72 of this chapter. They do apply to research and test reactors possessing material licensed under part 30.

#### **PART 40—DOMESTIC LICENSING OF SOURCE MATERIAL**

6. The authority citation for part 40 is revised to read as follows:

Authority: Secs. 63, 63, 64, 65, 81, 161, 182, 183, 186, 68 Stat. 932, 933, 935, 948, 953, 954, 955, as amended, secs. 11e(2), 83, 84, Pub. L. 95-604, 92 Stat. 3033, as amended, 3039, sec. 114, 83 Stat. 444, as amended (42 U.S.C. 2014(e)(2), 2092, 2093, 2094, 2095, 2111, 2113, 2114, 2201, 2232, 2233, 2238, 2232); sec. 274,

Pub. L. 86-373, 73 Stat. 686 (42 U.S.C. 2021); secs. 201, as amended, 202, 206, 68 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); sec. 375, 92 Stat. 3021, as amended by Pub. L. 97-435, 90 Stat. 2057 (42 U.S.C. 7022).

Section 40.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5841); section 40.31(g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 40.46 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 40.71 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

For the purposes of sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 40.3, 40.25(d)(1)-(3), 40.35 (a)-(d), and (f) 40.41 (b) and (c), 40.46, 40.51 (e) and (c), and 40.63 are issued under Sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); and §§ 40.5, 40.9, 40.25 (c), (d)(3), and (4), 40.26(c)(2), 40.35(e), 40.42, 40.60, 40.61, 40.62, 40.64, and 40.65 are issued under Sec. 161a, 68 Stat. 950, as amended (42 U.S.C. 2201(a)).

#### **§ 40.8 [Amended]**

7. In § 40.8, paragraph (b) is revised to read as follows:

#### **§ 40.8 Information collection requirements: OMB approval.**

(b) The approved information collection requirements contained in this part appear in §§ 40.25, 40.23, 40.31, 40.35, 40.42, 40.60, 40.61, 40.64, 40.65, and Appendix A.

8. A new § 40.60 under "Records, Reports, and Inspections" is added to read as follows:

#### **§ 40.60 Notification requirements.**

(a) *Immediate notification.* Each licensee shall notify the NRC as soon as possible but not later than 4 hours after discovery of any event involving licensed material that prevents or threaten to prevent immediate protective actions necessary to maintain and verify control of licensed material (includes fires, explosions, toxic gas releases, etc.).

(b) *Twenty-four hour notification.* Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:

- (1) Any contamination event that restricts access to the contaminated area by workers or the public for more than 24 hours.
- (2) Any event in which equipment necessary to prevent uncontrolled releases of radioactive material, or to prevent overexposures to radiation, or to mitigate the consequences of an accident, is disabled or fails to function as designed when it is needed. Notification is not required when an individual component is disabled or fails to function if redundant equipment is

operable and available to automatically perform the required function.

(3) Any event that requires medical treatment of a radioactively contaminated individual at a medical facility. Notification is not required if first aid at a licensee-maintained medical facility for a significant injury is the only treatment rendered.

(4) Any fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material.

(c) *Preparation and submission of reports.* Reports filed with the NRC pursuant to this section must have the names of persons who have received exposure to radiation stated in a separate part of the report. Reports made by licensees in response to the requirements of this section must be made as follows:

(1) Licensees shall make reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center. To the extent that the information is available at the time of notification, the information provided in these reports must include:

- (i) The caller's name and call back telephone number;
- (ii) A description of the event, including date and time;
- (iii) The exact location of the event;
- (iv) The isotopes, quantities, and chemical and physical form of the licensed material involved; and
- (v) Any personnel radiation exposure data available.

(2) Written report. Each licensee who makes a report required by paragraph (a) or (b) of this section shall submit a written follow-up report within 30 days of the initial report. These written reports must be sent to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, with a copy to the appropriate NRC regional office listed in appendix D of 10 CFR part 20. The reports must include the following—

- (i) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
- (ii) The exact location of the event;
- (iii) The isotopes, quantities, and chemical and physical form of the licensed material involved;
- (iv) Date and time of the event;
- (v) Corrective actions taken or planned and the results of any evaluations or assessments; and
- (vi) The extent of exposure of individuals to radiation or to radioactive materials.

<sup>3</sup> The commercial telephone number for the NRC Operations Center is (202) 961-0550.

(3) The provisions of § 40.60 do not apply to licensees subject to the notification requirements in § 50.72 of this chapter. They do apply to research and test reactors possessing material under part 40.

## PART 70—DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL

9. The authority citation for part 70 is revised to read as follows:

Authority: Secs. 51, 53, 161, 162, 183, 98 Stat. 929, 930, 948, 953, 954, as amended, sec. 234, 82 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2201, 2232, 2233, 2282); sec. 201, as amended, 202, 204, 206, 68 Stat. 1242, as amended, 1244, 1245, 1246, (42 U.S.C. 5841, 5842, 5845, 5846).

Sections 70.1(c) and 70.20a(b) also issued under sec. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 70.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 70.21(g) also issued under sec. 122, 68 Stat. 936 (42 U.S.C. 2152). Section 70.31 also issued under sec. 57d, Pub. L. 93-377, 88 Stat. 475 (42 U.S.C. 2077). Sections 70.36 and 70.44 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 70.61 also issued under sec. 186, 187, 68 Stat. 955 (42 U.S.C. 2236, 2237). Section 70.62 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138).

For the purpose of sec. 223, 96 Stat. 956, as amended (42 U.S.C. 2138); §§ 70.3, 70.19(c), 70.21(c), 70.22(a), (c), (d)-(k), 70.24(a) and (b), 70.32(a) (3), (5), (6), (d), and (i), 70.36, 70.39(b) and (c), 70.41(a), 70.42(a) and (c), 70.50, 70.57(b), (c), and (d), 70.58(a)-(g)(3), and (h)-(j) are issued under sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); §§ 70.7, 70.20a(a) and (d), 70.20b(c) and (e), 70.21(c), 70.24(b), 70.32(a)(6), (c), (d), (e), and (g), 70.36, 70.51(c)-(g), 70.56, 70.57(b) and (d), and 70.58(a)-(g)(3) and (h)-(j) are issued under sec. 161, 68 Stat. 949, as amended (42 U.S.C. 2201(i)); and §§ 70.5, 70.9, 70.20b(d) and (e), 70.38, 70.51(b) and (i), 70.50, 70.52, 70.53, 70.54, 70.55, 70.58(g)(4), (k), and (l), 70.59, and 70.60(b) and (c) are issued under sec. 161c, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

### § 70.8 [Amended]

10. In § 70.8, paragraph (b) is revised to read as follows:

§ 70.8 Information collection requirements: CMB approval.

(b) The approved information collection requirements contained in this part appear in §§ 70.19, 70.20a, 70.20b, 70.21, 70.22, 70.24, 70.32, 70.33, 70.34, 70.38, 70.39, 70.50, 70.51, 70.52, 70.53, 70.57, 70.58, 70.59, and 70.60.

11. A new § 70.50 under "Special Nuclear Material Control, Records, Reports and Inspections" is added to read as follows:

### § 70.50 Notification requirements.

(a) *Immediate notification.* Each licensee shall notify the NRC as soon as

possible but not later than 4 hours after the discovery of any event involving licensed material that prevents or threaten to prevent immediate protective actions necessary to maintain and verify control of licensed material (includes fires, explosions, toxic gas releases, etc.).

(b) *Twenty-four hour notification.* Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:

(1) Any contamination event that restricts access to the contaminated area by workers or the public for more than 24 hours.

(2) Any event in which equipment necessary to prevent uncontrolled releases of radioactive material, or to prevent exposure to radiation, or to mitigate the consequences of an accident is disabled or fails to function as designed when it is needed. Notification is not required when an individual component is disabled or fails to function if redundant equipment is operable and available to automatically perform the required function.

(3) Any event that requires medical treatment of a radioactively contaminated individual at a medical facility. Notification is not required if first aid at a licensee-maintained medical facility for a superficial injury is the only treatment rendered.

(4) Any fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material.

(c) *Preparation and submission of reports.* Reports filed with the NRC pursuant to this section must have the names of persons who have received exposure to radiation stated in a separate part of the report. Reports made by licensees in response to the requirements of this section must be made as follows:

(1) Licensees shall make reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center.<sup>1</sup> To the extent that the information is available at the time of notification, the information provided in these reports must include:

- (i) The caller's name and call back telephone number;
- (ii) A description of the event, including date and time;
- (iii) The exact location of the event;
- (iv) The isotopes, quantities, and chemical and physical form of the licensed material involved; and
- (v) Any personnel radiation exposure data available.

<sup>1</sup> The commercial telephone number for the NRC Operations Center is (202) 951-0550.

(2) Written report. Each licensee who makes a report required by paragraph (a) or (b) of this section shall prepare a written followup report within 30 days of the initial report. These written reports must be sent to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, with a copy to the appropriate NRC regional office, listed in appendix D of 10 CFR part 20. The reports must include the following—

(i) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;

(ii) The exact location of the event;

(iii) The isotopes, quantities and chemical and physical form of the licensed material involved;

(iv) Date and time of the event;

(v) Corrective actions taken or planned and the results of any evaluations or assessments; and

(vi) The extent of exposure of individuals to radiation or to radioactive materials.

(3) The provisions of § 70.50 do not apply to licensees subject to the notification requirements in § 50.72 of this chapter. They do apply to research and test reactors possessing material licensed under part 70.

Dated at Rockville, Maryland, this 30th day of April, 1990.

For the Nuclear Regulatory Commission,  
James M. Taylor,

Executive Director for Operations.

[FR Doc. 90-11150 Filed 5-11-90; 8:45 am]

BILLING CODE 7590-01-M

## DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of the Assistant Secretary for Housing-Federal Housing Commissioner

### 24 CFR Part 200

[Docket No. R-90-1370; FR-2407-P-02]

RIN 2502-AD01

Revision of Use of Materials Bulletin (UM) 40c Used in HUD Building Product Standards and Certification Program for Plywood and Other Performance Rated Wood-Based Structural-Use Panels

AGENCY: Office of the Assistant Secretary for Housing-Federal Housing Commissioner, HUD.

ACTION: Proposed rule.

Enclosure 3

PART 20 - STANDARDS FOR PROTECTION AGAINST RADIATION

1. The authority citation for Part 20 continues to read as follows:

AUTHORITY: Secs. 53, 53, 65, 81, 103, 104, 161, 68 Stat. 930, 933, 935, 936, 937, 948, as amended (42 U.S.C. 2073, 2093, 2095, 2111, 2133, 2134, 2201); Secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 20.408 also issued under Secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161).

For the purposes of Sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 20.101, 20.102, 20.103(a), (b), and (f), 20.104(a) and (b), 20.105(b), 20.106(a), 20.201, 20.202(a), 20.205, 20.207, 20.301, 20.303, 20.304, and 20.305 are issued under Sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); and §§ 20.102, 20.103(e), 20.401-20.407, 20.408(b), and 20.409 are issued under Sec. 161c, 68 Stat. 950, as amended (42 U.S.C. 2201(c)).

§ 20.403 [Amended]

2. In § 20.403, the semicolon and the word "or" following paragraph (a)(2) are removed and a period is inserted, and the semicolon and the word "or" following paragraph (b)(2) are removed and a period is inserted, and paragraphs (a)(3), (a)(4), (b)(3), and (b)(4) are removed.

3. Section 20.403(d)(2) is amended by revising the area code for the footnote from area code 202 to area code 301.



PART 30 - RULE OF GENERAL APPLICABILITY TO DOMESTIC LICENSING OF  
BYPRODUCT MATERIAL

(2.) 4. The authority citation for Part 30 is revised to read as follows:

AUTHORITY: Sec. 81, 82 Stat. 161, 182, 183, 186, 68 Stat. 935, 948, 953, 954, 955, as amended, Sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2111, 2112, 2201, 2232, 2233, 2236, 2237); Secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 30.7 also issued under Pub. L. 85-601, Sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 30.34(b) also issued under Sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 30.61 also issued under Sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

For the purposes of Sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 30.3, 30.34(b)(c) and (f), and 30.41(a) and (c), and 30.53 are issued under Sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); and §§ 30.6, 30.9, 30.36, 30.50, 30.51, 30.52, 30.55, and 30.56(b) and (c) are issued under Sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(c)).

(4) 5. Section 30.8(b) is revised to read as follows:

§ 30.8(b) The approved information collection requirements contained in this part appear in §§ 30.15, 30.19, 30.20, 30.32, 30.34, 30.36, 30.37, 30.38, 30.50, 30.51, 30.55, and 30.56.

(5.) 6. A new § 30.50 under Records, Inspections, Tests, and Reports is added to read as follows:

§ 30.50 Notification requirements.

(a) Immediate notification. Each licensee shall notify the NRC as soon as possible but not later than 4 hours after the discovery of any event involving licensed material that prevents ~~(or threaten to prevent)~~ immediate protective actions necessary to maintain and verify control of licensed material (includes fires, explosions, toxic gas releases, etc.).

(b) Twenty-four hour notification. Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:

(1) Any accidental contamination event that ~~(restricts)~~ requires access to the contaminated area by workers or the public to be restricted for more than 24 hours. No report is required if access to the area is restricted to allow isotopes with a half-life of less than 24 hours to decay prior to decontamination.

(2) Any event in which equipment ~~(necessary to prevent uncontrolled releases of radioactive material, or to prevent overexposures to radiation, or to mitigate the consequences of an accident, is disabled or fails to function as designed when it is needed, --Notification is not required when an individual component is disabled or fails to function if redundant equipment is operable and available to automatically perform the required function)~~ is disabled or fails to function as designed when:

- (i) the equipment is required to prevent uncontrolled releases exceeding regulatory limits, to prevent overexposures to radiation and radioactive materials, or to mitigate the severe consequences of an accident, and
- (ii) the safety function of the equipment - or the availability of the

safety function - is required when the equipment is disabled or fails to function, and

(iii) no redundant equipment is available and operable to automatically perform the required safety function.

(3) Any event that requires medical treatment ~~(of a radioactively contaminated individual)~~ at a medical facility of an individual with spreadable radioactive contamination on their clothing or on accessible portions of their body. *(note the exemption for superficial injury has been deleted).*

~~(Notification is not required if first aid at a licensee-maintained medical facility for a superficial injury is the only treatment rendered.~~

(4) Any fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material. No report is required for superficial damage (i.e., surface stains) <sup>class</sup> that do not affect the integrity of the licensed material or its container.

*Surface stains on the licensed material? - I do not understand this exemption?*

(c) Preparation and submission of reports. Reports filed with the NRC pursuant to this section must have the names of persons who have received exposure to radiation stated in a separate part of the report. Reports made by licensees in response to the requirements of this section must be made as follows:

(1) Licensees shall make reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center.<sup>1</sup> To the extent that the information is available at the time of notification, the information provided in these reports must include:

<sup>1</sup> The commercial telephone number for the NRC Operations Center is (301) (202) 951-0550.



- (i) The caller's name and call back telephone number;
- (ii) A description of the event, including date and time;
- (iii) The exact location of the event;
- (iv) The isotopes, quantities, and chemical and physical form of the licensed material involved; and
- (v) Any personnel radiation exposure data available.

(2) Written report. Each licensee who makes a report required by paragraph (a) or (b) of this section shall submit a written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the report contains all of the necessary information and the appropriate distribution is made. These written reports must be sent to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, with a copy to the appropriate NRC Regional office listed in Appendix D of 10 CFR Part 20. The reports must include the following --

- (i) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
- (ii) The exact location of the event;
- (iii) The isotopes, quantities, and chemical and physical form of the licensed material involved;
- (iv) Date and time of the event;
- (v) Corrective actions taken or planned and the results of any evaluations or assessments; and
- (vi) The extent of exposure of individuals to radiation or to radioactive materials.

(3) A written report shall be submitted within 30 days of occurrence of any event involving licensed material that threatens to cause an immediate disabling injury or threatens to prevent immediate protective actions necessary to maintain control of the licensed material.

*Vague*  
*How will this be determined?*

(2) (4) The provisions of § 30.50 do not apply to Licensees subject to the notification requirements in § 50.72. They do apply to research and test reactors possessing material licensed under Part 30.

*If injury is immediate, how can an event threaten to cause this?*

#### PART 40 - DOMESTIC LICENSING OF SOURCE MATERIAL

*An immediate injury occurs immediately, not in the future.*

(6.) 7. The authority citation for Part 40 is revised to read as follows:

AUTHORITY: Secs. 62, 63, 64, 65, 81, 161, 182, 183, 186, 68 Stat. 932, 933, 935, 948, 953, 954, 955, as amended, Secs. 11e(2), 83, 84, Pub. L. 95-604, 92 Stat. 3033, as amended, 3039, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2014 (e)(2), 2092, 2093, 2094, 2095, 2111, 2113, 2114, 2201, 2232, 2233, 2236, 2282); Sec. 274, Pub. L. 86-373, 73 Stat. 688 (42 U.S.C. 2021); Secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); Sec. 375, 92 Stat. 3021, as amended by Pub. L. 97-415, 93 Stat. 2067 (42 U.S.C. 2022).

Section 40.7 also issued under Pub. L. 95-601, Sec. 10, 92 Stat. 2951 (42 U.S.C. 5841) Section 40.31(g) also issued under Sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 40.46 also issued under Sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 40.71 also issued under Sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

For the purposes of Sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 40.3, 40.25(d)(1)-(3), 40.35(a)-(d), and (f) 40.41(b) and (c), 40.46, 40.51(a) and (c), and 40.63 are issued under Sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201(b)); and §§ 40.5, 40.9, 40.25(c), (d)(3), and (4),

40.26(c)(2), 40.35(e), 40.42, 40.60, 40.61, 40.62, 40.64, and 40.65 are issued under Sec. 1610, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

(7.) 8. Section 40.8(b) is revised to read as follows:

§40.8(b) The approved information collection requirements contained in this part appear in §§ 40.25, 40.26, 40.31, 40.35, 40.42, 40.60, 40.61, 40.64, 40.65, and Appendix A.

(8.) 9. A new § 40.60 under Records, Inspections, Tests and Reports is added to read as follows:

§ 40.60 Notification requirements.

(a) Immediate notification. Each licensee shall notify the NRC as soon as possible but not later than 4 hours after discovery of any event involving licensed material that prevents (~~or threatens to prevent~~) immediate protective actions necessary to maintain and verify control of licensed material (includes fires, explosions, toxic gas releases, etc.).

(b) Twenty-four hour notification. Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:

(1) Any accidental contamination event that (~~restricts~~) requires access to the contaminated area by workers or the public to be restricted for more than 24 hours.

(2) Any event in which equipment (necessary-to-prevent-uncontrolled releases-of-radioactive-material, or-to-prevent-overexposures-to-radiation, or to-mitigate-the-consequences-of-an-accident, is-disabled-or-fails-to function-as-designed-when-it-is needed,--Notification-is-not-required-when-an individual-component-is-disabled-or-fails-to-function-if-redundant-equipment-is operable-and-available-to-automatically-perform-the-required-function) is disabled or fails to function as designed when:

- (i) the equipment is required to prevent uncontrolled releases exceeding regulatory limits, to prevent overexposures to radiation and radioactive materials, or to mitigate the severe consequences of an accident, and
- (ii) the safety function of the equipment - or the availability of the safety function - is required when the equipment is disabled or fails to function, and
- (iii) no redundant equipment is available and operable to automatically perform the required safety function.

(3) Any event that requires medical treatment (~~of-a-radioactively contaminated-individual~~) at a medical facility of an individual with spreadable radioactive contamination on their clothing or on accessible portions of their body. (note the exemption for superficial injury has been deleted).  
~~(Notification-is-not-required-if-first-aid-at-a-licensee-maintained medical facility-for-a-superficial-injury-is-the-only-treatment-rendered.)~~

(4) Any fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material. No report is required  
 > for superficial damage (i.e., surface stains) that <sup>does</sup> not affect the integrity  
of the licensed material or its container.

(c) Preparation and submission of reports. Reports filed with the NRC pursuant to this section must have the names of persons who have received exposure to radiation stated in a separate part of the report. Reports made by licensees in response to the requirements of this section must be made as follows:

(1) Licensees shall make reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center.<sup>2</sup> To the extent that the information is available at the time of notification, the information provided in these reports must include:

- (i) The caller's name and call back telephone number;
- (ii) A description of the event, including date and time;
- (iii) The exact location of the event;
- (iv) The isotopes, quantities, and chemical and physical form of the licensed material involved; and
- (v) Any personnel radiation exposure data available.

(2) Written report. Each licensee who makes a report required by paragraph (a) or (b) of this section shall submit a written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the report contains all of the necessary information and the appropriate distribution is made. These written reports must be sent to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, with a copy to the appropriate NRC regional office listed in Appendix D of 10 CFR Part 20. The reports must include the following --

<sup>2</sup> The commercial telephone number for the NRC Operations Center is (301) ~~(202)~~ 951-0550.



- (i) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
- (ii) The exact location of the event;
- (iii) The isotopes, quantities, and chemical and physical form of the licensed material involved;
- (iv) Date and time of the event;
- (v) Corrective actions taken or planned and the results of any evaluations or assessments; and
- (vi) The extent of exposure of individuals to radiation or to radioactive materials.

(3) A written report shall be submitted within 30 days of occurrence of any event involving licensed material that threatens to cause an immediate disabling injury or threatens to prevent immediate protective actions necessary to maintain control of the licensed material.

(2) (4) The provisions of § 40.60 do not apply to licensees subject to the notification requirements in § 50.72. They do apply to research and test reactors possessing material under Part 40.

#### PART 70 - DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL

9. The authority citation for Part 70 is revised to read as follows:

AUTHORITY: Secs. 51, 53, 161, 182, 183, 68 Stat. 929, 930, 945, 953, 954, as amended, Sec. 234, 63 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2201, 2232, 2233, 2282); Secs. 201, as amended, 202, 204, 206, 88 Stat. 1242, as amended, 1244, 1245, 1246, (42 U.S.C. 5841, 5842, 5845, 5846).

Sections 70.1(c) and 70.20a(b) also issued under Secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 70.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 (42 U.S.C. 5851). Section 70.21(g) also issued under Sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 70.31 also issued under Sec. 57d, Pub. L. 93-377, 88 Stat. 475 (42 U.S.C. 2077). Sections 70.36 and 70.44 also issued under Sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 70.61 also issued under Secs. 186, 187, 68 Stat. 955 (42 U.S.C. 2236, 2237). Section 70.62 also issued under Sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138).

For the purposes of Sec. 223, 68 Stat. 958, as amended (42 U.S.C. 2273); §§ 70.3, 70.19(c), 70.21(c), 70.22(a), (b), (d)-(k), 70.24(a) and (b), 70.32(a)(3), (5), (6), (d), and (i), 70.36, 70.39(b) and (c), 70.41(a), 70.42(a) and (c), 70.56, 70.57(b), (c), and (d), 70.58(a)-(g)(3), and (h)-(j) are issued under Sec. 161b, 68 Stat. 948, as amended (42 U.S.C. 2201 (b)); §§ 70.7, 70.20a(a) and (d), 70.20b(c) and (e), 70.21(c), 70.24(b), 70.32(a)(6), (c), (d), (e), and (g), 70.36, 70.51(c)-(g), 70.56, 70.57(b) and (d), and 70.58 (a)-(g) (3) and (h)-(j) are issued under Sec. 161i, 68 Stat. 949, as amended (42 U.S.C. 2201(i)); and §§ 70.5, 70.9, 70.20b(d) and (e), 70.38, 70.51(b) and (i) 70.50, 70.52, 70.53, 70.54, 70.55, 70.58 (g)(4), (k), and (l), 70.59, and 70.60(b) and (c) are issued under Sec. 161o, 68 Stat. 950, as amended (42 U.S.C. 2201(o)).

10. Section 70.8(b) is revised to read as follows:

The approved information collection requirements contained in this part appear in §§ 70.19, 70.20a, 70.20b, 70.21, 70.22, 70.24, 70.32, 70.33, 70.34, 70.38, 70.39, 70.50, 70.51, 70.52, 70.53, 70.57, 70.58, 70.59, and 70.60.

11. A new § 70.50 under Special Nuclear Material Control, Records, Reports and Inspections is added to read as follows:

§ 70.50 Notification requirements.

(a) Immediate notification. Each licensee shall notify the NRC as soon as possible but not later than 4 hours after the discovery of any event involving licensed material that prevents ~~(or threaten to prevent)~~ immediate protective actions necessary to maintain and verify control of licensed material (includes fires, explosions, toxic gas releases, etc.).

(b) Twenty-four hour notification. Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:

(1) Any accidental contamination event that ~~(restricts)~~ requires access to the contaminated area by workers or the public to be restricted for more than 24 hours.

(2) Any event in which equipment ~~(necessary to prevent uncontrolled releases of radioactive material, or to prevent overexposures to radiation, or to mitigate the consequences of an accident, is disabled or fails to function as designed when it is needed, -- Notification is not required when an individual component is disabled or fails to function if redundant equipment is operable and available to automatically perform the required function)~~ is disabled or fails to function as designed when:

- (i) the equipment is required to prevent uncontrolled releases exceeding regulatory limits, to prevent overexposures to radiation and radioactive materials, or to mitigate the severe consequences of an accident, and
- (ii) the safety function of the equipment - or the availability of the

safety function - is required when the equipment is disabled or fails to function, and

(iii) no redundant equipment is available and operable to automatically perform the required safety function.

(3) Any event that requires medical treatment (~~of a radioactively contaminated individual~~) at a medical facility of an individual with spreadable radioactive contamination on their clothing or on accessible portions of their body. (note the exemption for superficial injury has been deleted).

~~(Notification is not required if first aid at a licensee-maintained medical facility for a superficial injury is the only treatment rendered.~~

(4) Any fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material. No report is required for superficial damage (i.e., surface stains) that <sup>does</sup> ~~do~~ not affect the integrity of the licensed material or its container.

(c) Preparation and submission of reports. Reports filed with the NRC pursuant to this section must have the names of persons who have received exposure to radiation stated in a separate part of the report. Reports made by licensees in response to the requirements of this section must be made as follows:

(1) Licensees shall make reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center.<sup>3</sup> To the extent that the information is available at the time of notification, the information provided in these reports must include:

<sup>3</sup> The commercial telephone number for the NRC Operations Center is (301) (202) 951-0550.

- (i) The caller's name and call back telephone number;
- (ii) A description of the event, including date and time;
- (iii) The exact location of the event;
- (iv) The isotopes, quantities, and chemical and physical form of the licensed material involved; and
- (v) Any personnel radiation exposure data available.

(2) Written report. Each licensee who makes a report required by paragraph (a) or (b) of this section shall prepare a written followup report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the report contains all of the necessary information and the appropriate distribution is made. These written reports must be sent to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, with a copy to the appropriate NRC regional office, listed in Appendix D of 10 CFR Part 20. The reports must include the following --

- (i) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
- (ii) The exact location of the event;
- (iii) The isotopes, quantities and chemical and physical form of the licensed material involved;
- (iv) Date and time of the event;
- (v) Corrective actions taken or planned and the results of any evaluations or assessments; and
- (vi) The extent of exposure of individuals to radiation or to radioactive materials.



(3) A written report shall be submitted within 30 days of occurrence of any event involving licensed material that threatens to cause an immediate disability or threatens to prevent immediate protective actions necessary to maintain control of the licensed material.

Vague

(2)(4) The provisions of § 70.50 do not apply to licensees subject to the notification requirements in § 50.72. They do apply to research and test reactors possessing material licensed under Part 70.

Dated at Rockville, Maryland, this \_\_\_\_\_ day of \_\_\_\_\_, 1990.

For the Nuclear Regulatory Commission.

James M. Taylor  
Executive Director for Operations

1) How is superficial damage defined?

2) "Threatens to cause" or "Threatens to prevent" is still too vague to enforce.

NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

AC 91-1  
PDR

TO: BRENDA JO. SHELTON (7714-MNBB)  
NRC CLEARANCE OFFICER  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555  
Nuclear Regulatory Commission

ACTION DATE

08/23/90

ON 07/13/90, YOU REQUESTED APPROVAL OF THE FOLLOWING INFORMATION COLLECTION:  
TITLE: 10 CFR 20, STANDARDS FOR PROTECTION AGAINST RADIATION  
AGENCY FORM NOS.:

IN ACCORDANCE WITH THE PAPERWORK REDUCTION ACT, WE HAVE TAKEN THE FOLLOWING ACTION ON THIS INFORMATION COLLECTION:

APPROVED FOR JOE THROU 10/31/92, OMB NO. 3150-0014.  
THE OFFICE OF MANAGEMENT AND BUDGET CONTROL NUMBER MUST BE DISPLAYED IN ACCORDANCE WITH 5 CFR 1320. UNLESS OTHERWISE PROVIDED IN "REMARKS," EXPIRATION DATES MUST ALSO BE DISPLAYED AS REQUIRED BY 5 CFR 1320.

EFFECT ON BURDEN:	RESPONSES	REPORTING HOURS
PREVIOUS STATUS	10,321	115,114
NEW STATUS	10,321	115,114
DIFFERENCE	0	0

REMARKS:

*Shirley,*  
*This is approval for 20.403,*  
*Notification of Accidents.*  
*Previously, they had sent us approval*  
*for 30.50, 40.60 & 70.50 but forgot*  
*20.403*  
*Beit*

OMB NO. 3150-0014

## ABSTRACT:

## \*RADIATION SAFETY REPORTING\*

THIS RULEMAKING AMENDS 12 CFR 20.403 BY DELETING CERTAIN INFORMATION IN PART 20.403 FOR MATERIAL LICENSEES AND ESTABLISHING NEW SECTIONS IN PARTS 30, 40, AND 70. THE PRIMARY PURPOSE OF THE RULEMAKING IS TO REVISE THE REPORTING REQUIREMENTS FOR MATERIAL LICENSEES. THE AMENDED REGULATIONS PROVIDE ADDITIONAL DETAILS ON WHEN TO NOTIFY THE NRC RELATIVE TO INCIDENTS.

ALLOWANCE LETTER: NO	FUNCTION: ENERGY INFORMATION, POLICY, AND REGULATION	
ON PLAN: NO	EXCEED BUDGET: NO	3504(H): N/A
NO. OF FORMS: 1	USE: PUBLIC	REQUEST: REVISION
RESPONDENTS: 8,650	RESPONSES: 10,321	HOURS: 115,114
AFFECTED PUBLIC: IND/HHLD & BUS/INST & NON-PROFIT INST		
SMALL BUSINESS: YES	ACTIVITY TYPE: 483	
PURPOSE: REG/COMP		
FREQUENCY: OCCAS		
COLLECTION METHOD: MAIL S/A & TEL IN		
RETENTION:	COLLECTION AGENT: ROSTNG DPT/AGCY	CONFIDENTIALITY: NO
COMPULSORY STATUS: MANDATORY		
FEDERAL COST: \$2,165	PUBLIC COST:	
REVIEWER: Ron Minsk		

ACTION	!AUTHORIZING OFFICIAL	!TITLE: DEPUTY ADMINISTRATOR!	DATE
APPROVED BY:	!S/JAMES B. MACRAE FOR	!OFFICE OF INFORMATION	!08/23/90
	!	!AND REGULATORY AFFAIRS	!

IMPORTANT: BECAUSE THIS INFORMATION COLLECTION HAS BEEN APPROVED, PLEASE SEND TO THE O.M.B. AS SOON AS AVAILABLE: ONE COPY OF THE FINAL PRINTED (OR OTHERWISE REPRODUCED) REPORT FORM, OR REPORTING OR RECORDKEEPING REQUIREMENT, TRANSMITTAL LETTER, INSTRUCTIONS, AND ANY DOCUMENT BEING SENT TO EACH RESPONDENT.

NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

AC 91-1  
PDR

TO: BRENDA JO. SHELTON (7714-MNBB)  
NRC CLEARANCE OFFICER  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555  
Nuclear Regulatory Commission

ACTION DATE

07/25/90

ON 05/29/90, YOU REQUESTED APPROVAL OF THE FOLLOWING INFORMATION COLLECTION:  
TITLE: 10 CFR 30 RULES OF GENERAL APPLICABILITY TO DOMESTIC  
LICENSING OF BYPRODUCT MATERIAL  
AGENCY FORM NOS.:

IN ACCORDANCE WITH THE PAPERWORK REDUCTION ACT, WE HAVE TAKEN THE FOLLOWING  
ACTION ON THIS INFORMATION COLLECTION:

APPROVED FOR USE THROUGH 02/28/93. OMB NO. 3150-0017.  
THE OFFICE OF MANAGEMENT AND BUDGET CONTROL NUMBER MUST BE DISPLAYED IN  
ACCORDANCE WITH 5 CFR 1320. UNLESS OTHERWISE PROVIDED IN "REMARKS,"  
EXPIRATION DATES MUST ALSO BE DISPLAYED AS REQUIRED BY 5 CFR 1320.

EFFECT ON BURDEN:	RESPONSES	REPORTING HOURS
PREVIOUS STATUS	76	60,064
NEW STATUS	76	60,064
DIFFERENCE	0	0

REMARKS:

*Shirley,*  
This is OMB approval for  
Notification of Incidents 10 CFR 20.403,  
30.50, 40.60 + 70.50. OMB neglected  
to send me the approval for Part 20  
and will be forwarding it in several  
days.  
*Beth S. Mary*

### ABSTRACT:

ALLOWANCE LETTER: NO      FUNCTION: ENERGY INFORMATION: POLICY, AND REGULATION  
ON PLAN: NO      EXCEED BUDGET: NO      3504(H): N/A  
NO. OF FORMS: 1      USE: PUBLIC      REQUEST: REVISION  
RESPONDENTS: 8,500      RESPONSES: 76      HOURS: 60+064  
AFFECTED PUBLIC: STATE/LOL GOV & BUS/INST & NON-PROFIT INST  
SMALL BUSINESS: YES      ACTIVITY TYPE: 999  
PURPOSE: REG/COMP  
FREQUENCY: OCCAS  
COLLECTION METHOD: MAIL S/A  
RETENTION:      COLLECTION AGENT: RCDKPNG RQT      CONFIDENTIALITY: NO  
COMPULSORY STATUS: MANDATORY  
FEDERAL COST:      PUBLIC COST:  
REVIEWER: Ron Minsk

ACTION	! AUTHORIZING OFFICIAL	! TITLE: DEPUTY ADMINISTRATOR	! DATE
APPROVED BY:	! /S/JAMES B. MACRAE FOR	! OFFICE OF INFORMATION	! 07/25/90
	!	! AND REGULATORY AFFAIRS	!

IMPORTANT: BECAUSE THIS INFORMATION COLLECTION HAS BEEN APPROVED, PLEASE SEND TO THE O.M.B. AS SOON AS AVAILABLE: ONE COPY OF THE FINAL PRINTED (OR OTHERWISE REPRODUCED) REPORT FORM, OR REPORTING OR RECORDKEEPING REQUIREMENT, TRANSMITTAL LETTER, INSTRUCTIONS, AND ANY DOCUMENT BEING SENT TO EACH RESPONDENT.



NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

AC 91-1

PDR

TO: JRENDA JO. SHELTON (7714-MN88)  
NRC CLEARANCE OFFICER  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555  
Nuclear Regulatory Commission

ACTION DATE

07/25/90

ON 05/29/90, YOU REQUESTED APPROVAL OF THE FOLLOWING INFORMATION COLLECTION:  
TITLE: 10 CFR 40 - DOMESTIC LICENSING OF SOURCE MATERIAL  
AGENCY FORM NOS.: NRC 484

IN ACCORDANCE WITH THE PAPERWORK REDUCTION ACT, WE HAVE TAKEN THE FOLLOWING ACTION ON THIS INFORMATION COLLECTION:

APPROVED FOR USE THROUGH 01/31/91. OMB NO. 3150-0020.  
THE OFFICE OF MANAGEMENT AND BUDGET CONTROL NUMBER MUST BE DISPLAYED IN ACCORDANCE WITH 5 CFR 1320. UNLESS OTHERWISE PROVIDED IN "REMARKS," EXPIRATION DATES MUST ALSO BE DISPLAYED AS REQUIRED BY 5 CFR 1320.

EFFECT ON BURDEN:	RESPONSES	REPORTING HOURS
PREVIOUS STATUS	1,506	15,985
NEW STATUS	1,506	15,985
DIFFERENCE	0	0

REMARKS:

ABSTRACTS:

ALLOWANCE LETTER: NO      FUNCTION: ENERGY INFORMATION, POLICY, AND REGULATION  
ON PLAN: NO      EXCEED BUDGET: NO      3504(H): N/A  
NO. OF FORMS: 1      USE: PUBLIC      REQUEST: REVISION  
RESPONDENTS: 300      RESPONSES: 1,506      HOURS: 15,985  
AFFECTED PUBLIC: STATE/LOL GOV & BUS/INST & NON-PROFIT INST  
SMALL BUSINESS: YES      ACTIVITY TYPE: 819  
PURPOSE: REG/COMP  
FREQUENCY: OCCAS  
COLLECTION METHOD: MAIL S/A  
RETENTION:      COLLECTION AGENT: RCDKPNG RQT      CONFIDENTIALITY: NO  
COMPULSORY STATUS: MANDATORY  
FEDERAL COST:      PUBLIC COST:  
REVIEWER: Ron Minsk

ACTION : AUTHORIZING OFFICIAL : TITLE: DEPUTY ADMINISTRATOR : DATE  
APPROVED BY: !/S/JAMES B. MACRAE FOR : OFFICE OF INFORMATION : 07/25/90  
! : AND REGULATORY AFFAIRS : !

IMPORTANT: BECAUSE THIS INFORMATION COLLECTION HAS BEEN APPROVED, PLEASE SEND TO THE O.M.B. AS SOON AS AVAILABLE: ONE COPY OF THE FINAL PRINTED (OR OTHERWISE REPRODUCED) REPORT FORM, OR REPORTING OR RECORDKEEPING REQUIREMENT, TRANSMITTAL LETTER, INSTRUCTIONS, AND ANY DOCUMENT BEING SENT TO EACH RESPONDENT.

NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

AC 91-1  
PDR

TO: BRENDA JO. SHELTON (7714-MNBB)  
NRC CLEARANCE OFFICER  
U.S. NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555  
Nuclear Regulatory Commission

ACTION DATE

07/25/90

ON 05/29/90, YOU REQUESTED APPROVAL OF THE FOLLOWING INFORMATION COLLECTION:  
TITLE: 10 CFR PART 70 - DOMESTIC LICENSING OF SPECIAL NUCLEAR  
MATERIAL  
AGENCY FORM NOS.:

IN ACCORDANCE WITH THE PAPERWORK REDUCTION ACT, WE HAVE TAKEN THE FOLLOWING  
ACTION ON THIS INFORMATION COLLECTION:

APPROVED FOR USE THROUGH 11/30/91. OMB NO. 3150-0009.  
THE OFFICE OF MANAGEMENT AND BUDGET CONTROL NUMBER MUST BE DISPLAYED IN  
ACCORDANCE WITH 5 CFR 1320. UNLESS OTHERWISE PROVIDED IN "REMARKS,"  
EXPIRATION DATES MUST ALSO BE DISPLAYED AS REQUIRED BY 5 CFR 1320.

EFFECT ON BURDEN:	RESPONSES	REPORTING HOURS
PREVIOUS STATUS	1,092	90,099
NEW STATUS	1,092	91,071
DIFFERENCE	0	972

EXPLANATION OF DIFFERENCE:

ADJUSTMENTS	RESPONSES	REPORTING HOURS
CORRECTION-ERROR	0	0
CORRECTION-REESTIMATE	0	0
CHANGE IN USE	0	0
PROGRAM CHANGES		
INCREASE	0	972
DECREASE	0	0

REMARKS:

OMB NO. 3150-0009

## ABSTRACT:

\*RADIATION, REPORTING, SAFETY, RADIATION SAFETY REPORTING\*  
THIS RULEMAKING AMENDS PART 70 BY REVISING THE REPORTING REQUIREMENTS  
FOR MATERIAL LICENSEES. THE AMENDED REGULATION PROVIDES ADDITIONAL  
DETAILS ON WHEN TO NOTIFY THE NRC RELATIVE TO INCIDENTS IN ORDER TO  
PROTECT PUBLIC HEALTH AND SAFETY.

ALLOWANCE LETTER: NO	FUNCTION: ENERGY INFORMATION, POLICY, AND REGULATION	
ON PLAN: NO	EXCEED BUDGET: NO	3504(H): N/A
NO. OF FORMS: 1	USE: PUBLIC	REQUEST: REVISION
RESPONDENTS: 427	RESPONSES: 1,092	HOURS: 91,071
AFFECTED PUBLIC: STATE/LCL GOV & BUS/INST & NON-PROFIT INST		
SMALL BUSINESS: YES	ACTIVITY TYPE: 999	
PURPOSE: REG/COMP		
FREQUENCY: OCCAS & SEMIA		
COLLECTION METHOD: MAIL S/A		
RETENTION:	COLLECTION AGENT: RECORDING RQT	CONFIDENTIALITY: NO
COMPULSORY STATUS: MANDATORY		
FEDERAL COST:	PUBLIC COST:	
REVIEWER: Ron Minsk		

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ACTION                   ! AUTHORIZING OFFICIAL   ! TITLE: DEPUTY ADMINISTRATOR! DATE  
APPROVED BY:           ! /S/JAMES B. MACRAE FOR ! OFFICE OF INFORMATION       ! 107/25/90  
                          !                                   ! AND REGULATORY AFFAIRS     !  
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IMPORTANT: BECAUSE THIS INFORMATION COLLECTION HAS BEEN APPROVED, PLEASE SEND  
TO THE O.M.B. AS SOON AS AVAILABLE: ONE COPY OF THE FINAL PRINTED (OR OTHERWISE  
REPRODUCED) REPORT FORM, OR REPORTING OR RECORDKEEPING REQUIREMENT, TRANSMITTAL  
LETTER, INSTRUCTIONS, AND ANY DOCUMENT BEING SENT TO EACH RESPONDENT.