



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

SEP 23 1991

NOTE TO: Nuclear Document System (NUDOCS), Mail Stop P1-37

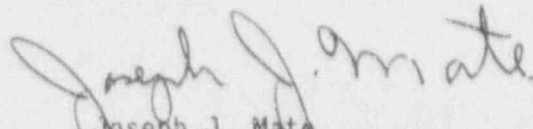
FROM: Joseph J. Mate  
Regulation Development Branch,  
Division of Regulatory Applications,  
Office of Nuclear Regulatory Research

SUBJECT: REGULATORY HISTORY INDEX

In accordance with Michael T. Lesar's memorandum of September 6, 1991, I am forwarding the Regulatory History Index for the final rule that was published in the Federal Register on August 16, 1991.

It should be noted that document #31 contains an attachment which is a SECY Paper and that document (Attachment to the Denton Memorandum) is marked for Central Files but is included behind the Denton Memorandum.

If there are any questions, please call me on extension 23795.

  
Joseph J. Mate  
Division of Regulatory Applications

Enclosure:  
As Stated

cc: Sher Bahadur

## REGULATORY HISTORY INDEX

### 10 CFR Parts 20, 30, 40, and 70 Notifications of Incidents

1. Federal Register Notice (55 FR 19890) dated Monday, May 14, 1990.
2. List of People requesting a copy of the Draft Regulatory Analysis, undated.
3. List of People and or organizations commenting on the Federal Register Notice for the proposed rule. (55 FR 19890 May 14, 1990).
  - A. University of California, Los Angeles, - School of Medicine - dated May 16, 1990.
  - B. Nuclear Information and Resource Service dated June 4, 1990.
  - C. Case Western Reserve University dated June 12, 1990.
  - D. AT&T Bell Laboratories dated June 18, 1990.
  - E. University of Virginia - Environmental Health and Safety - dated June 22, 1990.
  - F. Vermont Yankee Nuclear Power Corporation dated June 29, 1990.
  - G. University Hospitals of Cleveland dated June 27, 1990.
  - H. William Beaumont Hospital - Nuclear Medicine - dated June 26, 1990.
  - I. Richard S. Bredvad undated letter.
  - J. Advanced Nuclear Fuels Corporation dated July 12, 1990.
  - K. West Virginia University Hospitals - Radiology Department - dated July 18, 1990.
  - L. Department of Veterans Affairs dated July 20, 1990.
  - M. Allied Signal dated July 20, 1990.
  - N. United States Department of Commerce - National Institute of Standards and Technology - dated July 16, 1990.
  - O. American College of Nuclear Physicians dated July 27, 1990.
  - P. MAGNAFLUX Quality Services dated July 23, 1990.
  - Q. OHIO CITIZENS FOR RESPONSIBLE ENERGY, INC. dated July 23, 1990.

R. Duke Power dated July 24, 1990.

S. Sequoyah Fuels dated July 24, 1990.

T. NATIONAL ORGANIZATION OF TEST, RESEARCH, AND TRAINING REACTORS dated July 24, 1990.

U. Steve Cima dated July 17, 1990

V. NUCLEAR MANAGEMENT AND RESOURCES COUNCIL (NUMARC) dated July 30, 1990.

W. Commonwealth Edison dated July 30, 1990.

X. American College of Radiology dated July 30, 1990.

Y. Amersham Corporation dated July 27, 1990.

Z. University of California, Los Angeles - Community Safety/Radiation Safety - dated July 30, 1990.

AA. Westinghouse Electric Corporation dated dJuly 30, 1990.

AB. Ohmart Corporation dated July 30, 1990.

AC. William R. Mowry dated July 30, 1990.

AD. Louisiana Energy dated July 30, 1990.

AE. Vanderbilt University - Radiation and Environmental Safety Department dated July 30, 1990.

AF. Newport News Shipbuilding dated July 30, 1990.

AG. E.I. DUPONT DE NEMOURS & CO. (INC.) - Medical Products Department - dated July 26, 1990.

AH. 3 M - Medical Department - dated July 30, 1990.

AI. TENNESSEE VALLEY AUTHORITY dated July 31, 1990.

AJ. Union Electric dated August 1, 1990.

AK. MERCK SHARP & DOHME RESEARCH LABORATORIES dated July 27, 1990.

AL. General Electric - Nuclear Fuel and Components Manufacturing - dated July 30, 1990.

AM. Pacific Gas and Electric Company dated dJuly 31, 1990.

AN. Department of the Navy dated August 8, 1990.

4. Notice of Office of Management and Budget Action for 10 CFR Part 70 dated July 25, 1990.
5. Notice of Office of Management and Budget Action for 10 CFR Part 30 dated July 25, 1990.
6. Notice of Office of Management and Budget Action for 10 CFR Part 40 dated July 25, 1990.
7. Notice of Office of Management and Budget Action for 10 CFR Part 20 dated August 23, 1990.
8. Letter from Hugh L. Thompson, Deputy Executive Director for Nuclear Materials Safety, Safeguards, and Operations Support to St. Louis Testing Laboratories dated August 23, 1990.
9. FAX from Joe Mate (RES) for Jim Meyers (GPA) - State Programs Division dated November 6, 1990.
10. Memorandum From Sher Bahadur (RES) to Edward Baker III (OE), Richard E. Cunningham (NMSS), Thomas M. Novak (AEOD), Frank Congel (NRR), Carlton C. Kammerer (GPA), and Stuart A. Treby (OGC) dated October 24, 1990 subject PUBLIC COMMENTS ON THE PROPOSED RULE, NOTIFICATION OF INCIDENTS.
11. FAX from Joe Mate (RES) to John Buchanan (NRR) dated October 30, 1990.
12. Memorandum from LeMoine J. Cunningham (NRR) to Sher Bahadur (RES) dated November 7, 1990 subject PUBLIC COMMENTS ON THE PROPOSED RULE, NOTIFICATION OF INCIDENTS.
13. Note from Kevin Ramsey (NMSS) to Joe Mate (RES) dated November 8, 1990 subject IMNS Comments and Recommendations on Responses to Public Comments and the Final Rule on Notification of Incidents.
14. Memorandum from Thomas M. Novak (AEOD) to Sher Bahadur (RES) dated November 13, 1990 subject PUBLIC COMMENTS ON THE PROPOSED RULE, NOTIFICATION OF INCIDENTS.
15. Note from Michael Finkelstein (OGC) to Joe Mate (RES) dated November 14, 1990 subject OGC comments on the package finalizing the Notification of Incidents Rulemaking.
16. Memorandum from John Hickey (NMSS) to Sher Bahadur (RES) dated November 15, 1990 subject RESPONSES TO PUBLIC COMMENTS ON THE PROPOSED RULE FOR NOTIFICATION OF INCIDENTS.
17. Memorandum from Vandy L. Miller (GPA) to Sher Bahadur (RES) dated November 15, 1990 subject REQUESTS FOR COMMENTS ON THE NOTIFICATION OF INCIDENTS RULE.
18. Memorandum from Sher Bahadur (RES) to Edward Baker III (OE), Richard E. Cunningham (NMSS), Thomas M. Novak (AEOD), Frank Congel (NRR), Carlton

- C. Kammerer (GPA), and Stuart A. Treby (OGC) dated November 14, 1990 subject CANCELLATION OF MEETING ON THE PROPOSED RULE, NOTIFICATION OF INCIDENTS.
19. Memorandum from John Hickey (NMSS) Sher Bahadur (RES) dated November 15, 1990 subject RESPONSES TO PUBLIC COMMENTS ON THE PROPOSED RULE FOR NOTIFICATION OF INCIDENTS.
  20. Memorandum from John Hickey (NMSS) to Sher Bahadur (RES) dated December 5, 1990 subject PUBLIC COMMENTS ON AMENDMENTS TO 10 CFR 20.403
  21. Note from Mike Finkelstein (OGC) to Joe Mate (RES) dated December 13, 1990 subject OGC COMMENTS ON PART 20.403.
  22. Memorandum from John Hickey (NMSS) to Sher Bahadur (RES) dated January 11, 1991 subject DRAFT DISCUSSION FOR FINAL RULE ON NOTIFICATION OF INCIDENTS.
  23. Memorandum from Richard E. Cunningham (NMSS) to A. Bill Beach (Region IV) dated February 6, 1991 subject PROPOSED RULE ON NOTIFICATION OF INCIDENTS.
  24. Note from Alzonja Shepard (ADMIN) to Joe Mate (RFS) dated March 20, 1991 subject Authority Citations for Parts 20, 31, 34 and 39.
  25. Memorandum from Lorraine Cunningham (NRR) to James Lieberman (OE), John Hickey (NMSS), Donald A. Cool (RES), Robert L. Fonner (OGC), and Donald E. Hickman (AEOD) dated March 26, 1991 subject DRAFT MEMORANDUM.
  26. Memorandum from Eric S. Beckjord (RES) to Those on the Attached List dated May 6, 1991 subject FINAL RULEMAKING - NOTIFICATION OF INCIDENTS 10 CFR PARTS 20, 30, 40 AND 70.
  27. OGC comments on memo identified in item # 25.
  28. Memorandum from Edward L. Halman (ADMIN) to Eric S. Beckjord (res) dated May 10, 1991 subject REVIEW OF FINAL RULE ENTITLED "NOTIFICATION OF INCIDENTS".
  29. Memorandum from Brenda Jo Shelton (IRM) to Michael T. Lesar (ADMIN) dated May 13, 1991 subject Request for Comment and Concurrence of the Final Rule, 10 CFR 20, 30, 31, 34, 39, 40 and 70 , Notification of Incidents.
  30. Memorandum from Brenda Jo Shelton (IRM) to Shirley Hudson (RES) dated May 22, 1991 subject 10 CFR 20, 30, 31, 34, 39, 40 AND 70, NOTIFICATION OF INCIDENTS, FINAL RULE.
  31. Memorandum from Harold R. Denton (GPA) to Eric S. Beckjord (RES) dated May 15, 1991 subject FINAL RULEMAKING - NOTIFICATION OF INCIDENTS - 10 CFR PARTS 20, 30, 40 and 70.

32. Memorandum from James Lieberman (OE) to Eric S. Beckjord (RES) dated May 21, 1991 subject FINAL RULEMAKING - NOTIFICATION OF INCIDENTS 10 CFR PARTS 20, 30 40 and 70.
33. Memorandum from Robert Bernero (NMSS) to Eric S. Beckjord (RES) dated May 23, 1991 subject CONCURRENCE ON FINAL RULE - NOTIFICATION OF INCIDENTS.
34. Memorandum from Thomas E. Murley (NRR) to Eric S. Beckjord (RES) dated May 23, 1991 subject FINAL RULEMAKING - NOTIFICATION OF INCIDENTS 10 CFR PARTS 30, 40 and 70.
35. FAX from Kevin Rainsey (NMSS) to Joe Mate (RES) dated May 29, 1991 undated.
36. Memorandum for James M. Taylor (EDO) from Eric S. Beckjord (RES) dated July 8, 1991 subject FINAL RULEMAKING - NOTIFICATION OF INCIDENTS 10 CFR PARTS 20, 30, 31, 34, 39, 40 and 70.
37. Federal Register Notice, Nuclear Regulatory Commission, Final Rule, Notifications of Incidents (56 FR 40757).
38. Statement from NRC dated August 19, 1991 subject NRC AMENDS REPORTING REQUIREMENTS FOR MATERIALS LICENSEES.
39. Note to Dr. Mark Bruels from Joseph J. Mate (RES) dated August 23, 1991 subject Publication of the Final Rule - Notification of Incidents.

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. Crowder, Jr.,  
Administrator, Food, Safety and Inspection Service.

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

BILLING CODE 3410-DM-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 § 50.72 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 20.408 also issued under sec. 135, 141, Public Law 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. 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. 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.

#### 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. 81, 82 Stat. 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, 2239, 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, 82 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. 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. 161c, 68 Stat. 950, as amended (42 U.S.C. 2201(c)).

##### § 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 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 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 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.

(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. 62, 63, 64, 65, 81, 161, 162, 183, 186, 68 Stat. 932, 933, 935, 946, 953, 954, 955, as amended, secs. 11e(2), 63, 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, 2207, 2232, 2233, 2236, 2282); sec. 274,

Pub. L. 96-373, 73 Stat. 688 (42 U.S.C. 2021); secs. 201, as amended, 202, 306, 68 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 564, 564a, 564b); sec. 375, 92 Stat. 3033, as amended by Pub. L. 97-415, 90 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. 5641) 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. 956, 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. 181b, 68 Stat. 946, 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. 181c, 68 Stat. 950, as amended (42 U.S.C. 2201(c)).

#### § 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, 40.26, 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 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 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.<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.

(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>1</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, 182, 183, 68 Stat. 929, 930, 948, 953, 954, as amended, sec. 234, 83 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, 5847, 5849, 5846).

Sections 70.1(c) and 70.20a(b) also issued under sec. 135, 141, Pub. L. 97-425, 90 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. 164, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 70.51 also issued under sec. 180, 187, 68 Stat. 965 (42 U.S.C. 2230, 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. 956, 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 (f), 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, 70.56 (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)).

### § 70.6 [Amended]

10. In § 70.6, paragraph (b) is revised to read as follows:

### § 70.6 Information collection requirements: OMB 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.

AC 91-1-  
PDR

PEOPLE REQUESTING A COPY OF  
"DRAFT REGULATORY ANALYSIS" TO:  
SENT

AMERICAN COLLEGE OF NUCLEAR PHYSICIANS  
1101 CONNECTICUT AVE N.W.  
SUITE 700  
WASHINGTON D.C. 20036

ATTN: VALERIE FEDIO

MAY 18, 1990

JOE BATISTE  
6211 HUMMINGBIRD ST.  
HOUSTON TEXAS 77096

MAY 18, 1990

OFFICER IN CHARGE  
NAVAL SEA SYSTEMS COMMAND DET.  
RASSO  
YORKTOWN VA. 23691-5098

MAY 30, 1990

(ATTN: WILLIAM MORRIS)

MIKE SHEETZ  
UNIVERSITY OF PITTSBURGH  
RADIATION SAFETY OFFICE  
A-550 CRABTREE HALL  
PITTSBURGH PA. 15261

MAY 31, 1990

COMMANDER A LETTER ON AMC  
PRESIDIO OF CALIFORNIA 94129  
ATTN: HEALTH PHYSICIST

JUNE 2, 1990

(ATTN: LT. CINA)

SAIC  
1910 GOODRIDGE DR.  
MCLEAN VA, 22102

(ATTN. ANN RATLIF)

JUNE 19, 1990

MS, LYNNE FA'ROBENT  
NUMARC  
1706 EYE ST N.W.  
SUITE 300  
WASH. D.C.

JULY 11, 1990

CAROL O'CLAIRE  
OHIO EMERGENCY MANAGEMENT AGENCY  
TECH. HAZARD BR.  
2825 W. GRANVILLE RD.  
COLUMBUS OHIO 43235-2712

JULY 11, 1990

LIST OF COMMENTERS

1. University of California, Los Angeles
2. Nuclear Information and Resource Service
3. Case Western Reserve University
4. AT&T Bell Laboratories
5. University of Virginia
6. Vermont Yankee Nuclear Power Corp.
7. University Hospitals of Cleveland
8. William Beaumont Hospital
9. Mr. Richard S. Bredvad
10. Advanced Nuclear Fuels Corporation
11. West Virginia University Hospitals
12. Department of Veterans Affairs
13. Allied Signal
14. Department of Commerce
15. American College of Nuclear Physicians/Society of Nuclear Medicine
16. MQS Inspection Inc.
17. Susan L. Hiatt
18. Duke Power
19. Sequoyah Fuels Corp.
20. National Organization of Test, Research, and Training Reactors
21. Steve Cima
22. Nuclear Management and Resources Council
23. Commonwealth Edison
24. American College of Radiology
25. Amersham Corp.
26. University of California, Los Angeles (Individual)
27. Westinghouse Electric Corp.
28. Ohmart Corp.
29. William R. Mowry
30. Louisiana Energy
31. Vanderbilt University
32. Newport News Shipbuilding
33. E.I. DuPont De Nemours & Co.
34. 3 M Co.
35. Tennessee Valley Authority
36. Union Electric
37. Merck Sharp & Dohme Research Laboratories
38. General Electric
39. Pacific Gas and Electric Co.
40. Department of the Navy

DOCKET NUMBER PR 20, 30, 40 & 70  
PROPOSED RULE (55 FR 19890)

AC 91-1  
PDR  
UCLA

UNIVERSITY OF CALIFORNIA, LOS ANGELES

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SANTA BARBARA • SANTA CRUZ

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Secretary, U.S. N.R.C.  
Washington, DC 20555

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

UCLA SCHOOL OF MEDICINE  
HARBOR - UCLA MEDICAL CENTER  
DEPARTMENT OF RADIOLOGY  
1000 CARSON STREET  
TOFRANCE, CALIFORNIA 90509

May 16, 1990

Attention: Docketing and Service Branch  
RIN 3150-AC91, "Notification of incidents"  
FR55(93): 19890-19895, 14 May 90.

Dear Sir:

I would like to comment on your proposed rule for "Notification of Incidents" from the point of view of medical, biomedical research, and radio-pharmaceutical licensees. I am not an expert in nuclear reactor safety nor in the use of multithousand curie sealed sources for various industrial applications, but many of the potential situations you describe in these settings truly appear dangerous and life-threatening. It therefore seemed totally incongruous that you would include reporting requirements for some extremely common and trivial events included under "Contamination Events", "Personal Injury Events", and "Fires and Explosions." Your rule suffers greatly from a lack of understanding of the spectrum of significance of such events, and must be substantially altered to exclude insignificant radiation events, or significant events with insignificant radiation components (e.g. a research laboratory having a significant fire after which 20  $\mu$ Ci C-14-glucose is not recovered.) This rule generally suffers from the usual NRC mindset of doggedly pursuing a prescriptive regulation when educated judgment is the only valid standard.

In my 30 years of experience as a broad licensee in biomedical research, nuclear pharmacy, and nuclear medicine environments I have witnessed incidents involving contamination, personal injury, and fires and explosions which would have become "reportable" under this regulation. Absolutely none of them had any radiation hazard significance whatsoever, and the presence of NRC personnel, or the need to write a report to NRC, would have constituted a superfluous nuisance. Anyone worth licensing must be able to handle trivial radiation events in these categories. The problem with these proposed regulations is that they totally exclude realistic experience and common sense.

For example, let us take the category of explosions. NRC imagines bulging and exploding uranium hexafluoride cylinders, and writes the proposed 30.50(4). However, the most common type of explosion I have witnessed (dozens of times) is screwcap vials or stoppered test tubes containing fresh tissue with tracer quantities of radionuclides that get left sitting around a laboratory or even in a cold room and rot because of bacterial or fly contamination. The explosion is caused by a buildup of gas such as CO<sub>2</sub>. These explosions are really disgusting and stink abominably. However, they constitute no radiation hazard at all, and should not be reported to NRC. It would make much more sense to let the licensee decide if the explosion was significant or not before reporting.

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Similar reasoning applies to the case of fires. The hazards of the fire may far outweigh the hazards from the release of a few  $\mu\text{Ci}$  of C-14, H-3, S-35, Ca-45, P-32, I-125, or I-131. Contamination considerations may be unimportant, and the licensee may feel perfectly comfortable dealing with the incident without NRC "help". On the other hand, I would definitely report a Chernobyl.

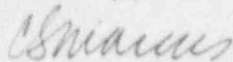
I also cannot accept the need to report contamination resulting in 24 hrs "off limits". That is, not unless a real danger lurked behind the closed door instead of a contaminated collimator or a spill of a short-lived radionuclide that was hard to clean up because of cracks in the linoleum or absorbant material (e.g. carpet). Again, if NRC could climb out of its prescriptive mindset it could finally become relevant in our field. Even if the contamination were greater than trivial, I still see no reason to inform NRC so long as the licensee feels comfortable handling it. Most nuclear medicine and nuclear pharmacy licensees are far more highly trained and experienced in this area than most NRC inspectors, anyway. I also disagree with the criteria for reporting personal injury events. I have treated a few significant injuries that involved radioactive contamination, but no radiation hazard (e.g. an explosion with toxic solvents to the eye, bad cuts from broken glass, and penetrating foreign bodies.) None of these were the business of NRC. On the other hand, if I admitted a patient from San Onofre involved in a bad explosion with significant long-lived alpha emitter contamination, I guess I could figure out all by myself that NRC might have a passing interest in being informed!

In summary, I sincerely urge NRC to drastically alter these regulations for biomedical, nuclear medicine, and nuclear pharmacy licensees and merely require reporting of dangerous situations. It is not as though there are large numbers of glaring examples of life-threatening accidents going unreported in which NRC would have made sterling contributions not considered by the licensee. I doubt that there are any, or certainly not more than very few indeed.

If these changes are not made, we will have still another inappropriate regulation spawned by an NRC group that has no comprehension of our field. The rule will be appropriately ignored, there will be vindictive harassment for semantic violations, and even more pointless misunderstanding will occur between the regulator and the licensee. This rule should not be an item of compatibility either, because no intelligent Agreement State would wish to incorporate such a poorly conceived notion.

It is surely time that the Research Group, after an enduring record of uninterrupted failure, learned to discard the concept of prescriptive regulation and rely instead on the judgment and performance of competent professionals in the field of nuclear medicine and nuclear pharmacy.

Sincerely,



Carol S. Marcus, Ph.D., M.D.  
Director, Nuclear Medicine Outpt. Clinic  
Bldg. A-13 and  
Assoc. Prof. of Radiological Sciences, UCLA

CSM:dt



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DOCKETING &  
SERVICE

## Nuclear Information and Resource Service

1424 16th Street, N.W., Suite 601, Washington, D.C. 20036 (202) 328-0002

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Great Lakes Energy Alliance\*

\*Organizations listed  
for identification only

June 4, 1990

### Secretary

U.S. Nuclear Regulatory Commission  
Washington, DC 20555

ATTN: Docketing and Service Branch

Re: Proposed Rule #RIN 3150-AC91  
Notification of Incidents

Thank you for this opportunity to comment on the  
above-referenced proposed rule.

The Nuclear Information and Resource Service (NIRS)  
generally agrees with the concept and substance of  
the proposed rule.

However, we suggest one improvement. Although a  
four-hour "immediate notification" requirement is  
probably appropriate for most incidents that may  
occur at material licensee facilities, some  
incidents may be more serious and require speedier  
notification.

We suggest that the proposed rule be amended to  
require one-hour notification to the NRC (and state  
and local authorities) of incidents with the  
substantial potential for injury to off-site members  
of the public. Another way of wording this might be  
to set a limit--perhaps projected off-site releases  
of 5 rem or chemical toxicity equivalent to 5 rem--  
for one-hour notification.

Our intent is to ensure that the NRC, and relevant  
state and local agencies, are promptly informed of  
incidents in which the health and safety of members  
of the public may be threatened.

We do not believe addition of this suggestion would  
be burdensome to the materials licensees. It would  
primarily affect large fuel chain facilities and  
perhaps a few large research reactors, which do (or  
at least should) have the expertise necessary to

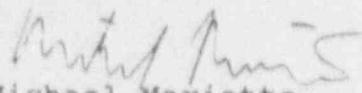
*dedicated to a sound non-nuclear energy policy.*

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rapidly assess such events. In addition, the number of such events, one hopes, would be quite small.

Indeed, in most such events, one would expect prompt notification to the NRC even in the absence of such a requirement. However, it does not seem to us too much to ask that a company be required to pick up the phone and call the NRC and local authorities when the public may be in danger.

We hope these comments have been helpful.

  
Michael Mariotte  
Executive Director

DOCKET NUMBER PR 20, 30, 40 & 70  
 PROPOSED RULE  
 DOCKETED (55 FR 19890)  
 USNRC

AC 91-1  
 PDR

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90 JUN 19 P2:52

OFFICE OF SECRETARY  
 U.S. NUCLEAR REGULATORY COMMISSION  
 WASHINGTON, D.C. 20555

June 12, 1990



Secretary  
 U.S. Nuclear Regulatory Commission  
 Washington, D.C. 20555  
 ATTN: Docketing and Service Branch

SUBJECT: Proposed NRC Modification of 10 CFR 20, 30, 40, and  
 70 - Notifications of Incidents

Dear Sirs:

I would not support the proposed rule based upon 1) the number of reports that licensees might expect to generate yearly may be inordinately large, and 2) the proposed change does not explain how to eliminate or minimize reports of events that do not require a prompt NRC response.

A problem with the proposed standard is that it puts the burden of interpretation on the licensee as to whether an immediate, or 24 hour notification is warranted. There are no definitive criteria for action. It is incumbent upon the licensee to determine if "NRC standards for protection against radiation have been exceeded".

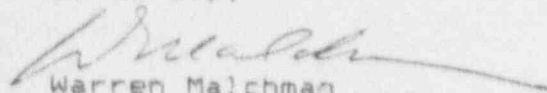
The existing 10 CFR Part 20.403 is specific in nature. It defines when a licensee shall immediately report any events involving byproduct, source or special nuclear material that may have caused or threatens to cause: 1) exposure to any individual and it references specific radiation doses, 2) it specifies significant "releases" of radioactive material in units of concentration, 3) it requires reporting where there is a loss of one working week or more if the operation of any facility is affected, and 4) damage to property in excess of \$200,000 must also be reported.

Twenty-four hour notification also references specific exposure release criteria. Reporting is required if there is loss of one day or more of operation or damage to property in excess of \$ 2,000.

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The current 10 CFR Part 20 section for "Notification of Incidents" is very specific and therefore supports the licensee by interpreting when notifications are required. It is obviously difficult for the NRC to stipulate all cases when notification is required. It is in the interest of DWRU, however, to oppose the proposed rule as it can create confusion, commensurate with no criteria (under emergency conditions) with which to make definitive judgments.

Sincerely,

  
Warren Malchman  
Radiation Safety Officer

cc: R. James Henderson  
Hossein Sadid  
Kenneth Basch  
Paul Howard, Ph.D.

## 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 been 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 1052; 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 § 50.72 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 identifies 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 self-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 (MF/BB-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, 101, 66 Stat. 930, 933, 935, 956, 937, 948, as amended (42 U.S.C. 2037, 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 sec. 135, 141, Public Law 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10153, 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), 20.205, 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. 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.

#### 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. 81, 87, 161, 182, 183, 186, 68 Stat. 935, 946, 953, 954, 955, as amended, Sec. 234, 63 Stat. 444, as amended (42 U.S.C. 2111, 2112, 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. 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. 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. 161c, 68 Stat. 950, as amended (42 U.S.C. 2201(c)).

##### § 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 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 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.

(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 individual 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. 52, 53, 54, 55, 81, 161, 162, 163, 166, 68 Stat. 932, 933, 935, 948, 953, 954, 955, as amended, secs. 11e(2), 53, 54, 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. 686 (42 U.S.C. 2021); sec. 201, as amended, 202, 205, 68 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); sec. 375, 92 Stat. 3021, as amended by Pub. L. 97-415, 98 Stat. 2067 (42 U.S.C. 2022).

Section 40.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2081 (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. 164, 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. 955, 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 40.62 are issued under Sec. 161b, 68 Stat. 945, as amended (42 U.S.C. 2201(b)); and §§ 40.5, 40.8, 40.23 (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. 1810, 68 Stat. 950, as amended (42 U.S.C. 2201(e)).

#### § 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, 40.26, 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.<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.

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

(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, 182, 183, 68 Stat. 829, 930, 948, 953, 954, as amended; sec. 234, 65 Stat. 444, as amended (42 U.S.C. 2271, 2073, 2201, 2232, 2253, 2272); sec. 201, as amended, 202, 204, 206, 78 Stat. 1242, as amended, 1244, 1245, 1246 (42 U.S.C. 5011, 5042, 5045, 5046).

Sections 70.1(c) and 70.2(a)(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. 172, 66 Stat. 939 (42 U.S.C. 2152). Section 70.31 also issued under sec. 37d, Pub. L. 93-377, 88 Stat. 475 (42 U.S.C. 2077). Sections 70.36 and 70.44 also issued under sec. 184, 66 Stat. 954, as amended (42 U.S.C. 2234). Section 70.61 also issued under sec. 195, 187, 68 Stat. 965 (42 U.S.C. 2236, 2237). Section 70.62 also issued under sec. 108, 66 Stat. 939, as amended (42 U.S.C. 2139).

For the purposes of sec. 223, 68 Stat. 956, as amended (42 U.S.C. 2273): §§ 70.3, 70.11, 70.21(c), 70.22 (a), (b), (d)-(k), 70.24 (a) and (b), 70.32(a) (3), (5), (6), (d), and (f), 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)(5), (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. 948, as amended (42 U.S.C. 2201(i)); and §§ 70.5, 70.9, 70.20b (d) and (e), 70.36, 70.51 (b) and (f), 70.50, 70.52, 70.53, 70.54, 70.55, 70.56 (g)(4), (k), and (l), 70.59, and 70.60 (b) and (c) are issued under sec. 161a, 68 Stat. 950, as amended (42 U.S.C. 2201(e)).

#### § 70.8 [Amended]

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

#### § 70.8 Information collection requirements: OMB 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, 70.36, 70.38, 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 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 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.

(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]

NRLING CODE 7050-01-01

<sup>1</sup> The commercial telephone number for the NRC Operations Center is (202) 951-0530.

## PART 20 • STANDARDS FOR PROTECTION AGAINST RADIATION

suits of surveys used to evaluate the release of radioactive effluents to the environment.

(3) Records of disposal of licensed materials made pursuant to §§ 20.302, 20.303, removed § 20.304,<sup>1</sup> and Part 61 of this chapter are to be maintained until the Commission authorizes their disposition.

(4) Records which must be maintained pursuant to this part may be the original or a reproduced copy or microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by Commission regulations.

(5) If there is a conflict between the Commission's regulations in this part, license condition, or technical specification or other written Commission approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this part for such records shall apply unless the Commission pursuant to § 20.501, has granted a specific exemption from the record retention requirements specified in the regulations in this part.

[25 FR 10914, Nov. 17, 1960, as amended at 41 FR 18301, May 3, 1976; 47 FR 57480, Dec. 27, 1982]

### § 20.402 Reports of theft or loss of licensed material.

(a)(1) Each licensee shall report to the Commission, by telephone, immediately after it determines that a loss or theft of licensed material has occurred in such quantities and under such circumstances that it appears to the licensee that a substantial hazard may result to persons in unrestricted areas.

(2) Reports must be made as follows:

(i) Licensees having an installed Emergency Notification System shall make the reports to the NRC Operations Center in accordance with § 50.72 of this chapter.

(ii) All other licensees shall make reports to the Administrator of the appropriate NRC Regional Office listed in Appendix D of this part.

(b) Each licensee who makes a report under paragraph (a) of this section shall, within 30 days after learning of the loss or theft, make a report in writing to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, D.C. 20555, with a copy to the appropriate NRC Regional Office listed in Appendix D of this part. The report shall include the following information:

(1) A description of the licensed material involved, including kind, quantity, chemical, and physical form;

(2) A description of the circumstances under which the loss or theft occurred;

(3) A statement of disposition or probable disposition of the licensed material involved;

(4) Radiation exposures to individuals, circumstances under which the exposures occurred, and the extent of possible hazard to persons in unrestricted areas;

(5) Actions which have been taken, or will be taken, to recover the material; and

(6) Procedures or measures which have been or will be adopted to prevent a recurrence of the loss or theft of licensed material.

(c) Subsequent to filing the written report the licensee shall also report any substantive additional information on the loss or theft which becomes available to the licensee, within 30 days after he learns of such information.

(d) Any report filed with the Commission pursuant to this section shall be so prepared that names of individuals who may have received exposure to radiation are stated in a separate part of the report.

(e) For holders of an operating license for a nuclear power plant, the events included in paragraph (b) of this section must be reported in accordance with the procedures described in § 50.73 (b), (c), (d), (e), and (g) of this chapter and must include the information required in paragraph (b) of this section. Events reported in accordance with § 50.73 of this chapter need not be reported by a duplicate report under paragraph (b) of this section.

[34 FR 7500, May 9, 1969, as amended at 38 FR 1271, Jan. 11, 1973; 48 FR 33859, July 26, 1983]

### § 20.403 Notifications of incidents.

(a) *Immediate notification.* Each licensee shall immediately report any events involving byproduct, source, or special nuclear material possessed by the licensee that may have caused or threatens to cause:

(1) Exposure of the whole body of any individual to 25 rems or more of radiation; exposure of the skin of the whole body of any individual of 150 rems or more of radiation; or exposure of the feet, ankles, hands or forearms of any individual to 375 rems or more of radiation; or

(2) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 5,000 times the limits specified for such materials in Appendix B, Table II of this part; or

(3) A loss of one working week or more of the operation of any facilities affected; or

(4) Damage to property in excess of \$200,000.

(b) *Twenty-four hour notification.* Each licensee shall within 24 hours of discovery of the event, report any event involving licensed material possessed by the licensee that may have caused or threatens to cause:

(1) Exposure of the whole body of any individual to 5 rems or more of radiation; exposure of the skin of the whole body of any individual to 30 rems or more of radiation; or exposure of the feet, ankles, hands, or forearms to 75 rems or more of radiation; or

(2) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 500 times the limits specified for such materials in Appendix B, Table II of this part; or

(3) A loss of one day or more of the operation of any facilities affected; or

(4) Damage to property in excess of \$2,000.

(c) Any report filed with the Commission pursuant to this section shall be prepared so that names of individuals who have received exposure to radiation will be stated in a separate part of the report.

DOCKET NUMBER  
PROPOSED RULE PR 20, 30, 40 + 70  
(55 FR 19890)

AC 91-1  
PDR

LOCKETED  
USNRC



AT&T Bell Laboratories

90 JUN 21 P3:12

600 Mountain Avenue  
Murray Hill, NJ 07974-2070  
201 582 3000

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

June 18, 1990

4

Secretary  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Attn: Docketing and Service Branch

Re: Proposed Rule on Notification of Incidents

The following comments are submitted in response to the  
U.S.N.R.C.'s proposed rule in F.R. Vol. 55, No. 93, pp.  
19890-19895, May 14, 1990:

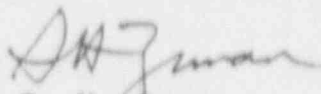
1. Appropriateness. The proposed rule is an appropriate and a reasonable clarification of the rules which would be replaced.
2. Number of reports. This licensee anticipates zero added reports to be required per year based on the proposed rule. However, conservative misinterpretations of the new rule at 30.50(b) (2) may lead to as many as one or two unnecessary reports per year. This is due to the vague wording of 30.50(b) (2) (see below).
3. Minimize unnecessary reports. Unnecessary reporting could be minimized by providing more clear wording of section 30.50(b) (2), such as is given in the Discussion in the last paragraph on page 19891. The specific problem here is that the wording "is disabled" is disconnected from the phrase "when it is needed." Thus, any time the equipment is disabled the licensee may deem it necessary to notify the NRC. To solve this problem, the three tests (pg. 19891) used to decide whether an event is reportable under 30.50(b) (2) should be made an explicit part of the regulation.

900628054

4. Overlooked events. Placing the new notification requirements in 30.50, instead of in 20.403, may create unnecessary confusion. Specifically, persons unfamiliar with both 30.50 and 20.403 may read only one section and overlook a reporting requirement listed in the other. This could result in reportable events not being reported. The solution would be to combine the new requirements with the old and list them all in 20.403.

For questions or clarification of the above comments feel free to phone the undersigned at 201-582-2792.

Sincerely,



G. H. Zeman  
Chairman, Radiation  
Protection Committee



DOCKET NUMBER **PR 60, 50, 404 70**  
PROPOSED RULE **(35 FR 19870)**

UNIVERSITY OF VIRGINIA

ENVIRONMENTAL HEALTH AND SAFETY

DOCKETED  
USNRC

(5)

SPECIAL MATERIALS HANDLING FACILITY  
EDGEMONT ROAD

June 22, 1990

'90 JUN 25 1990  
P.O. BOX 3425  
CHARLOTTESVILLE, VA 22903  
TELEPHONE (804) 924-7334

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Attention: Docketing and Service Branch  
Secretary, U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Gentl. :

I am writing in response to the rule proposed in Volume 55, Number 93 of the Federal Register dated May 14, 1990 (RIN 3150-AC91). I have number of concerns about the proposed rule.

A general observation is that the justification for the revision seems weak. Two events were attributed as reasons to amend the rule. I would characterize two events as anecdotal, not a symptom of generic problems with the existing rule. Secondly, as noted in the background, no material was released and no one was injured in these cases. This hardly indicates that action is required "to protect the public health and safety." Finally, the licensees were cited for violations for failing to report these events which indicates that this was poor compliance, on the part of those licensees, rather than a need for new rules. Writing new rules does not mean that people will comply with them any more than old rules.

9007160404

My second category of comments relates to contamination events. Minor contamination events commonly occur in research and medical settings. Frequently access to contaminated areas is restricted in the interest of ALARA and efficiency. This rule appears to encourage licensees to clean contamination sites as quickly as possible without regard to other important considerations including whether time is available for decontamination at that moment and whether this is the safest time to clean the spill. I imagine that licensees will attempt to clean virtually all contamination sites within 24 hours, even if good reasons dictate waiting longer, to avoid reporting requirements and possible violations. Without this regulation, licensees can take advantage of decay, especially in nuclear medicine, to minimize collective dose equivalent.

A second comment related to the "contamination events" is that the phrase "free of contamination" should be defined. Frequently, spill areas will have some residual activity after thorough decontamination. The rule requires NRC notification for spills "if the contamination cannot be cleaned up within 24 hours." Clearly, then if you believe this condition is important enough to always require NRC notification, which as I have stated above, do not, then further guidance is necessary.

A third comment related to "contamination events" is related to how an area will be defined. The access to a laboratory bench top or a small area on the floor may be restricted as a result of

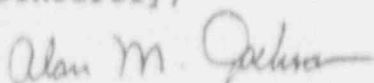
a contamination spill. Is the definition of an "area" limited to a certain size? Clearly, contamination of an entire building is important and contamination of laboratory items, like a pipet is not. Please clarify this definition to avoid a very large number of superfluous reports being filed. I remain unconvinced that all posted contamination areas with access controls represent hazards worth reporting to the NRC. A fair comparison can be made to non-radiological hazards, access to areas are frequently limited for other accidents without reporting to federal agencies deemed necessary to protect the public.

My next comment is whether de minimis amounts will be established for incidents. Specifically, is there an amount of a radionuclide for which no reporting would be required for fire and explosions, personal injury, etc. Certainly, a fire in a building that contained  $\mu\text{Ci}$  amounts of  $^3\text{H}$  would not be important since the absolute risk is very small and exit signs might contain far more than that value. This de minimis amount will limit reports totally unrelated to threats to the "public health and safety."

A final comment is that this rule is prescriptive and seems to eliminate the place for licensee judgement. I believe that dangerous conditions arise when individuals abrogate their essential role in safety and look exclusively toward outside organizations such as the NRC. I believe that the NRC should give licensees some credit for making proper decisions and not

micromanage our operations. In fact, I am disagreeing with NRC in this case because I will not satisfy for your contention that all <sup>99m</sup>Tc spills should be decontaminated within 24 hours. Licensees are likely to be better informed about how manage their own operations than the NRC.

Sincerely,

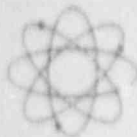


Alan M. Jackson

Health Physicist

(804) 924-7961

Note: These comments are those of mine alone and do not represent the opinion of the University of Virginia.



DOCKET NUMBER  
PROPOSED RULE **PR 20, 30, 40 & 70**  
(55 FR 19870)

AC 91-1  
PDR  
(6)

VERMONT YANKEE NUCLEAR POWER CORPORATION

USNRC

P. O. BOX 157  
GOVERNOR HUNT ROAD  
VERNON, VERMONT 05354  
**90 JUL -2 P6 '38**

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

June 29, 1990  
YYV #90-223

Secretary, U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Docketing and Service Branch

Dear Sir:

Subject: Proposed Amendments for Licensee Reporting Requirements Regarding  
Notification of Incidents Related to Radiation Safety

The proposed amendment to Part 30.50b.1 as explained in the discussion section for Contamination Events, paragraph two, reads as follows: "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 clothing, NRC notification within 24 hours would be required." This is a common occurrence in Nuclear Power Plants; any time a valve leaks, it can result in contamination of an area. We require the use of protective clothing by workers who perform the decontamination. If this rule is interpreted in this manner, it would require 24 hour notifications on a frequent basis for minor contamination events. In other words, the NRC staff might be inundated by reports from Nuclear Utilities as a result of this rule.

Please consider establishing better guidance for reporting requirements, other than the use of protective clothing.

Sincerely,

*Remi Morrisette*  
Remi R. Morrisette  
Plant Health Physicist

RRM/mjm:RP0062.1/RPDisk

9007162110

DOCKET NUMBER  
PROPOSED RULE **PR 20, 30, 40 + 70**  
(55 FR 19890) LRL:LL  
USNRC

AC 91-1  
PDR  
(7)

'90 JUL -3 P12:36  
**University Hospitals**  
of Cleveland  
OFFICE OF  
DOCKETING AND SERVICE  
BRANCH

June 27, 1990

Secretary  
US Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Docketing and Service Branch

Re: Proposed rule on Notification of Incidents, published in  
Federal Register Vol. 55, No. 93, pp 19890-19895, dated  
Monday, May 14, 1990.

Dear Sir:

I wish to make one suggestion that may simplify reporting of  
radiological events.

The proposed 10 CFR 30.50(a), and its counterparts in parts  
40 and 70, would require immediate notification, or within 4  
hours of discovery, of certain events.

I suggest establishing a threshold for each radionuclide,  
such that an event involving more than the threshold would  
require "immediate" notification. An event involving less than  
the threshold would require only a 24-hours notification.

The threshold could be equal to a factor times the activity  
listed for each radionuclide in 10 CFR part 20, Appendix C. The  
factor could depend on the physical and chemical form of the  
nuclide.

Sincerely,

*PSR*

P.S. Rao, Ph.D  
Radiation Safety Officer

PSR/rl

*9007160118*

.....  
.....  
.....

**Beaumont**

William Beaumont Hospital Nuclear Medicine

DOCKETED  
USNRC

'90 JUL -5 P5:04

June 26, 1990

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

U.S. Nuclear Regulatory Commission  
Washington D.C. 20555

ATTN: Docketing and Service Branch

SUBJECT: Comments on Proposed Rule on Notification of Incidents

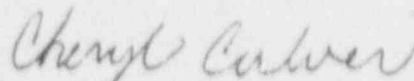
The proposed rule requires that "any contamination event that restricts access to the contaminated area by workers or the public for more than 24 hours" be reported to the NRC within 24 hours.

In the practice of Nuclear Medicine, some spills of short-lived radionuclides are best handled by restricting access pending complete decay. This significantly reduces personnel exposure prior to decontamination. Under this proposed rule restricting access to the spill and waiting more than 24 hours before decontamination would require immediate notification of the NRC.

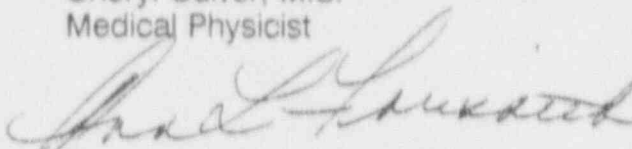
The handling, decontamination and reporting of spills is already regulated by the NRC. This proposed rule just adds another reporting burden on the medical licenses.

The NRC should clarify what they mean by "any contamination event that restricts access". The licensee should not have to immediately report a contamination event if the RSO decides to handle minor spills by restricting access pending complete decay of short-lived radionuclides. This type of event does not require a prompt NRC response.

Sincerely,



Cheryl Culver, M.S.  
Medical Physicist



Ann Forsaith, M.P.H.  
Radiation Safety Officer

CC:mr  
(CC/L626.90)

9007180032

3601 Wes. Thirteen Mile Road Royal Oak, Michigan 48072 (313) 551-4100

DOCKET NUMBER  
PROPOSED RULE 20, 30, 40 & 70  
(55 FR 19890)

AC 91-1  
PDR (9)

Secretary,  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

DOCKETED  
USNRC

ATTN: Docketing and Service Branch

90 JUL 16 P7:46

Dear Sir:

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

This letter is in response to the notice appearing in the Federal Register, Vol. 55, No. 93, Monday, May 14, 1990 involving the proposed rules change to 10 CFR Parts 20, 30, 40, and 70 regarding "Notification of Incidents."

I wish to make known that as a nuclear power plant worker (over 20 years) I am in full agreement with the proposed changes, specifically the reporting of radioactive contamination events.

It is my opinion that the implementation of these rulings will contribute significantly to cleaning up nuclear power plants. I have one concern regarding the rule in that it is felt that the rule could be sidestepped by leaving areas contaminated that are contaminated at the time the rule is implemented.

Sincerely,



Richard S. Bredvad  
1244 North 10th Street,  
Manitowoc, Wisconsin 54220

4008150213

DOCKET NUMBER  
PROPOSED RULE **PR 20,30,40 & 70**  
(55FR19890)

AC 91-1

PDR

(10)

**ADVANCED NUCLEAR FUELS CORPORATION**

2101 HORN RAPIDS ROAD, PO BOX 130, RICHLAND, WA 99352-0130  
(509) 375-8100 TELEX 15-2878

DOCKETED  
USNRC

REGULATORY COMPLIANCE

90 JUL 20 P4:14

July 12, 1990  
CWM:90:095

SERVICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

U.S. Nuclear Regulatory Commission  
Attn: Docketing and Service Branch  
Secretary of the Commission  
Washington, DC 20555

Dear Sir:

**PROPOSED RULE ON NOTIFICATIONS OF INCIDENTS**

Advanced Nuclear Fuels Corporation (ANF) has reviewed the proposed rule entitled, "Notifications of Incidents," which was published in the Monday, May 14, 1990 edition of the Federal Register, Vol. 55, No. 93, p. 19890.

ANF is a supplier of light water reactor fuel and related services. It operates a low-enriched uranium fuel fabrication plant which is located in Richland, Washington. It has been an NRC licensee for nearly 20 years.

The comments which are given below are in response to the NRC's request for comments on the four subject areas described in Column 3, p. 19890 of the Federal Register Notice.

1. Appropriateness of the Proposed Amendments

We believe that the proposed deletions of the paragraphs in Part 20.403 which relate to loss of operation and damage to property are appropriate. In our judgment, those criteria are normally not even remotely related to the public health and safety. The appropriateness of the proposed additional reporting requirements is discussed later in this letter.

2. Expected Number of Licensee Reports

We expect that the number of incident reports we might generate as a result of the proposed reporting requirements would range from three to six reports a year.

3. Minimization of Number of Reports

Making generic reporting requirements a matter of regulation can be detrimental to report minimization. The problem is that in the attempt to make the reporting requirements appropriate for all licensees, most end up not being appropriate for any licensee. Implementation of generic requirements depends upon the judgment of the various individuals involved. It can result in interpretation problems between inspectors and licensees due to the lack of specificity of generic requirements. This can lead to excessive reporting by the licensees of nonhazardous events in an effort to avoid confrontations and violations.

We recognize the need for certain events to be brought to the attention of the NRC and other licensees; however, we believe that there are several ways to minimize the number of incident reports and not exclude events which require prompt action by the NRC. One approach would be to put the desired action levels and reporting requirements in the individual licenses which are specific to the licensee rather than to enact generic reporting regulations for all licensees.

For example, if certain hazards surround the use of  $UF_6$  cylinders, address action levels and reporting requirements for those few licensees who use  $UF_6$  cylinders. The prime safety features necessary for use of  $UF_6$  cylinders are limiting the mass of contained  $UF_6$ , the maximum temperature, periodic inspection and leak containment. The generic reporting requirement in the proposed regulations which was supposed to pertain to a bulging  $UF_6$  cylinder, did not, in our opinion, relate to such an event.

In another example, a hole in a HEPA filter is not necessarily a significant hazard to the public. With all of the HEPA filters in use, it is not unusual to find a hole in one. This does not mean that filter failure is incipient or that the radionuclide concentration in the exhaust air is high. The activity of the air being exhausted from the stack is the important fact. A requirement that is appropriate is a stack sampling program and a set of action levels which ensure containment. Such features should be a part of individual licenses. They would not be the same for all licensees.

Thus, one method of reducing the number of incidents reported and not exclude events which require prompt action by the NRC would be to put action levels and reporting requirements in the individual licenses specific to that licensee. This would minimize the number of nonhazardous reports and assure that incidents requiring prompt NRC action would be reported.

Another approach would be to reduce the number and type of licensees subject to the proposed generic reporting requirements. For example, we submit that those licensees required to have an Emergency Plan under Part 70.22 already have sufficient checks and balances and event reporting requirements within the

Plan and the license which alerts the NRC to potential public safety events. Those licensees should be exempt from the proposed reporting requirements. The generic requirements could then be tailored towards the other smaller, less complicated licensee systems. This scheme could provide for more specific reporting of real hazards, reduce reporting of nonhazards, and aid interpretations of requirements by regulators and licensees.

As written and intended, the proposed reporting requirements result in a very significant excess over and above the few real incidents, and all significant incidents might not be reported.

4. Reporting of Events Requiring Prompt NRC Actions

There might be events which threaten the public health and safety or environment but these would be reported under the current requirements of our Emergency Plan or specific license. If there is specific health and safety information the Commission believes it needs for public safety, we believe those requirements should be spelled out in the individual licenses rather than enacting generic reporting regulations.

We also have difficulty relating the proposed additional reporting requirements to events which would affect the public health and safety or the environment. In our minds, proposed Parts 70.50(b)(1) and (b)(3) and the corresponding examples contained in the Supplementary Information do not describe events which threaten the public health and safety or the environment. In fact, the examples of contamination events do not appear to represent events requiring prompt reporting to the NRC. For material licensees such as ANF who have extensive radiological safety programs, the handling of such contamination events is clearly the responsibility of the licensee and action levels are normally stated in the specific license. The prompt reporting requirements proposed for Part 70.50(b)(1) are, in our opinion, counterproductive to strong licensee programs. As a result, we recommend that if generic reporting requirements are enacted that these two proposed Parts, 70.50(b)(1) and (b)(3), be withdrawn.

Similarly, if proposed Parts 70.50(a), (b)(2) and (b)(4) are to be issued as generic requirements, we believe that qualifying language should be added to restrict those events to consequences which could affect the public health and safety or the environment. We believe that those proposed Parts should be rewritten and reissued under a new comment period. As currently written, it is very difficult to determine precisely which events need to be reported; e.g., do all fires involving uranium, regardless of quantity, degree of containment, or inherent stability of the material need to be reported?

In summary, we support the deleting amendments proposed for 10 CFR Part 20.403 in that they remove criteria that did not describe events which threaten the public health and safety or the environment. We do not, however, support the additional notification requirements proposed for Parts 30, 40 and 70. We do not believe that the enactment of regulations for

July 12, 1990  
Page 4


generic reporting requirements is the most effective way of establishing reporting requirements for incidents. We believe that the most effective way for the Commission to obtain this desired information is to establish specific action and reporting requirements in the individual licenses. We recommend that the proposed reporting requirements for Parts 30, 40 and 70 be withdrawn and instead, specific requirements be incorporated in individual licenses.

Alternatively, we recommend that the Commission exempt those licensees with an approved Emergency Plan meeting the requirements for Part 70.22(i)(1)(ii) from the notification requirements of proposed Part 70.50. The generic reporting requirements could then be tailored toward the other smaller, less complicated licensee systems. This could provide more specific reporting of real hazards, reducing reporting of nonhazards, and aid interpretations of requirements by regulators and licensees.

If none of the above approaches are taken, we recommend that proposed Parts 70.50(b)(1) and (b)(3) be withdrawn, and that Parts 70.50(a), (b)(2), and (b)(4) be rewritten to restrict the reportable events to those with consequences which affect the public health and safety or the environment and be reissued under a new comment period.

We appreciate this opportunity to participate in the rulemaking process.

Very truly yours,

A handwritten signature in cursive script, appearing to read "CW Malody".

Charles W. Malody, Manager

jrs



# West Virginia University Hospitals

Radiology Department—Radiation Safety

DOCKET NUMBER  
PROPOSED RULE **PR 20, 30, 40 & 70**  
(55 FR 19890)

RC 97-1  
PDR  
(11)

LOOKED  
USNRC

'90 JUL 23 AM 1:24

18 July 1990

Secretary

U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555  
Attention: Docketing and Service Branch

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Gentlemen,

This is to comment on the proposed rule changes dealing with the notification of incidents. I agree that a better way is needed to describe events that pose a hazard to public health and safety, but I am not in total agreement with the particulars of the proposed rules. In particular, the section on contamination events seems unduly restrictive, at least as I read it. It requires notification if access to an area must be restricted for more than 24 hours because of contamination. It makes no distinction about the source of contamination or the efforts which might be successful in removing it.

I-131 therapy for patients with thyroid carcinoma and other thyroid conditions necessitates the hospitalization of a substantial number of patients each year. We average one per month at our institution alone. The possibility of contamination of members of the general public with radioactive iodine as well as the levels of external radiation are the main reasons for the hospitalization. Regulatory Guide 10.8, Revision 2 (August 1987) contains a model program for dealing with these patients. This requires the decontamination of these patient rooms before they can be released for general occupancy and specifies the level of acceptable contamination. All such rooms in my experience, even when carefully prepared ahead of time with plastic wrap and absorbent paper, require extensive decontamination. The rooms remain restricted during the time it takes for this decontamination. Under the proposed regulation, it would be necessary to notify the Commission any time that this decontamination could not be carried out within 24 hours of the discharge of the patient. Our experience is that between 5 and 10% of patients produce extensive enough contamination for this to be the case. This estimate is only approximate because manpower cannot always be devoted exclusively to decontamination when there are other safety matters to be attended to. In any case, the various regional offices would be inundated with reports of what is, in fact, a very routine occurrence.

Medical Center Drive  
Morgantown, WV 26506-8150

304-293-3413

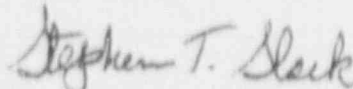
Ruby Memorial Hospital  
West Virginia University  
Children's Hospital  
Jon Michael Moore  
Trauma Center

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It is not clear how best to avoid this situation without compromising the effectiveness of the proposed regulations in the areas of legitimate concern. Possibilities include (1) restricting the definition of "contamination event," (2) excluding contamination resulting from a contaminated patient from the scope of the regulation and (3) excluding temporal extensions of restricted areas beyond what would normally be necessary in order to allow for a more deliberate pace of decontamination. Alternative (2) has the additional feature, which may be viewed as either advantageous or disadvantageous, that contamination of an individual, reportable under the proposed 10 CFR 30.50(b)(3), which results in decontamination of the medical facility treating the individual would be reported only once rather than twice.

Should you wish any further comments on this subject, please feel free to contact me.

Sincerely,



Stephen T. Slack, Ph. D.  
Chief, Medical Physics  
and Radiation Safety

LOCKE  
USN

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Department of  
Veterans Affairs

90 JUL 23 AM 1:25

July 20, 1990

OFFICE OF SECRETARY  
DOCKETING & REGISTRATION  
BRANCH  
Refer to: 695/00C

Secretary, U.S. Nuclear  
Regulatory Commission  
ATTN: Docketing and Service Branch  
Washington, DC 20555

SUBJ: Comments on Proposed Rules, 20.403 and 30.50

Greetings:

1. The proposed rules are inappropriate. Concerning the examples given in the SUPPLEMENTARY INFORMATION: Background, willful, slothful, or ignorant violations would not have been prevented under the proposed rules. What is appropriate is to restore services to licensees through the NRC regional offices to full availability. Once, we could telephone an inspector or staff member at any time for consultation or advice. Now, calls for general information are not taken after 12:00 noon, (although calls relating to emergencies are still taken at any time). This inhibition of communications enables small misunderstandings to grow and become procedural problems.

2. The proposed rule is inappropriate because it is not well thought out. This is shown by the inconsistencies between "control of licensed material" (Fed. Reg. May 14, 1990, p. 19891) and the proposed paragraph 30.50. The discussion states that "Licensees will need to exercise some judgement in determining when events require an immediate NRC notification". But proposed 30.50 (a) does not allow for the exercise of judgement. The mandatory shall requires reporting of the all inclusive any event which open-endedly threatens to prevent precisely immediate protective actions. The consequence of this inappropriately written regulation would be the activation of the bureaucratic reflex, and all emergencies and many building maintenance problems would be deemed reportable, under the classification of the almighty etc.

3. The proposed rule 30.50 (b)(1) is inappropriate because it places a new and unnecessary burden on the licensee who has a restricted area. Its adoption might result in increased radiation exposure to workers. At present, it is reasonable to set a low action level for contamination and/or whole body exposures in a restricted area, because one may supplement clean-up efforts with radioactive decay, if necessary, to achieve that level. But if the total time to achieve the low action level exceeds 24 hours, then the reporting and follow-up required by the proposed regulation will add to the cost of doing business. The RSO's time and attention will be deducted from other radiation safety tasks. It will then be unreasonable to retain the action level at a low value, and it will be reasonable to

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accept what degree of decontamination can be achieved (below the legal limit) in 23.9 hours. Hence, individual and collective radiation exposures of workers in restricted areas may increase. The solution is to limit the licensee's lawful use of restricted areas only by the ALARA principle.

4. The number of reports generated yearly by this facility if the proposed rules are adopted would be as follows:

A. Twelve to fifteen fire alarms. The alarm indicates a condition which threatens to prevent my control of licensed material which is stored or used in various parts of the building.

B. Two or three tornado alerts. Tornadoes threaten to remove licensed material from my control, and to disrupt communications for more than four hours thereafter.

C. Two or three power failures. The emergency generator comes on at once, but the computer-controlled liquid scintillation counters go down and must be re-normalized before they can be used to count wipe tests following a spill, if one should occur.

Therefore, the total number of reports required by the proposed rule would be approximately 20 per year.

5. Two actions could be taken which would improve radiation safety, whereas adoption of the proposed rule would reduce it.

A. The first action, mentioned previously, is to open the phone lines again to the regional headquarters for consultation on any question at any time. This would have an immediate beneficial effect and should be less expensive than to create a new response organization in Washington.

B. The second action is to hold periodic regional one-day seminars on current problems in radiation safety. Each should feature a few invited speakers from the licensees as well as from the NRC staff. In my opinion, these seminars would be of great benefit to NRC staff members as well as to the licensees.

6. In conclusion, the background material presented tends to show that the current rule, 20.403, is working as it was intended in giving inspectors a framework for detecting unsafe practices and for having them corrected. The proposed rule does not have any new features which would compel obedience, and its adoption could conceivably be counterproductive. Improved radiation safety will result if communications are improved between NRC professionals and radiation safety professionals in the field.

Sincerely,

*Robert E. Black*

ROBERT E. BLACK  
Radiation Safety Officer



DOCKETED  
USNRC

Allied-Signal Inc.  
Engineered Materials Sector  
Fluorine Products Division  
P.O. Box 430  
Metropolis, IL 62960  
Telephone (618) 524-2111

'90 JUL 24 AM 1:10

July 20, 1990

OFFICE OF SECRETARY  
DOCKETING & CERTIFIED MAIL:  
BRANCH-773-198-272

Secretary,  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Docketing and Service Branch

Dear Sir or Madam:

Allied-Signal Inc. appreciates the opportunity to comment on the proposed rule: "Notification of Incidents" as published in The Federal Register, May 14, 1990. We operate a UF<sub>6</sub> conversion facility which is licensed and inspected by NRC. We wish to provide the following comments on the rule as published:

Immediate Notification, 40.60(a):

The language in 40.60(a) is somewhat ambiguous and could result in numerous events being reported which are in fact unimportant and in full compliance with existing Part 20 requirements. We recommend use of the language provided in the preamble which states:

"events or conditions involving licensed material (which) threaten an immediate disabling injury or threaten to prevent immediate protective actions necessary to protect the public or the environment."

Contamination Event, 40.60(b)(1):

We agree that a contamination event which cannot be decontaminated to NRC release limits, or license limits within 24 hours should be reported to NRC; however, we strongly disagree with the preamble statement that "This requirement is intended to cover events that cause accidental contamination in excess of the radiological conditions normally present." This intent is contrary to the ALARA concept and could reverse the purpose of ALARA in reducing exposures. Some licensees could choose to allow contamination levels to rise to the maximum allowed under NRC regulations; this level would then become the

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"radiological condition normally present", and reporting would not be required.

Many facilities have worked diligently to reduce exposures under the ALARA principle. The proposed 40.60(b)(1) could require the generation of 400-500 reports per year for our facility, e.g., if contamination levels have been reduced under ALARA to 10-20% of NRC limits, a report would be required each time the contamination level was 25% of NRC limits for more than 24 hours.

We urge the commission to adopt defined limits for contamination events, and further suggest the current NRC limits for contamination of air, water and surfaces are adequately safe for both restricted and unrestricted exposures.

Safety Equipment Related Events 40.60(b)(2):

Equipment will fail, and individual system components will fail; however, these events should not be reportable unless they result in exceeding existing limits. The use of the word "uncontrolled" very likely would result in many minor events being reported, e.g., the spillage of a few grams of natural uranium from a crack in a pipe, valve, or drum may be "uncontrolled" during the instant it occurs, but would not result in any existing NRC regulation being violated.

The existing reporting requirements under 20.403 and 20.405 appear adequate to protect employees and the environment.

Personal Injury Events 40.60(b)(3):

The 24-hour notification should be required only if contamination of the individual or treating medical facility exceeds an NRC regulatory limit, the license limit, or the NRC unrestricted release limit.

Preparation and Submission of Reports 40.60(c)

We feel existing requirements under Part 20 and Part 21 are adequate to provide proper notification to NRC of significant events. The written reports required under the regulation as proposed could consume several thousand man-hours by NRC and licensees in preparing and reviewing the reports which could be generated annually. Our experience indicates that when an event is reported to

NRC via telephone, and NRC thinks the event may be of safety significance, one or more inspectors are generally dispatched to the site to investigate and prepare a written report. Licensee duplication of the written report does not appear justified.

The deletion of reporting property damage, and loss of working time from the existing regulations appears appropriate since this generally has little relationship to exposure of employees or the public. We feel the new Part 40.60, as proposed, will create confusion for NRC inspectors and licensees, and will result in many hours of non-productive effort by both parties which will not enhance radiation protection of the public or our employees.

Sincerely,



M. D. Kosmider  
Plant Manager

MDK/sm

cc: W. S. Nix - SOL-3  
E. J. Freeman - MEY-4  
J. E. Honey  
P. G. Gasperini  
M. L. Shepherd  
R. K. Hahn  
R. W. Yates  
H. C. Roberts



DOCKET NUMBER  
PROPOSED RULE **PR 20,30,40+70** (55 FR 19890)  
UNITED STATES DEPARTMENT OF COMMERCE  
National Institute of Standards and Technology  
[formerly National Bureau of Standards]  
Gaithersburg, Maryland 20899  
DOCKETED  
USNRC

July 16, 1990

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OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

(14)  
AC 91-1  
PDR

Secretary  
U.S. Nuclear Regulatory Commission  
ATTN: Docketing and Service Branch  
Washington, D.C. 20555

Reference: 55 FR 19890 (RIN3150-AC91)

Dear Sir:

Please consider the following comments regarding the proposed changes to the 10CFR reporting requirements. The need for this revision is puzzling since the examples cited do not appear to reflect circumstances that necessitate a revision. The fire example in this proposed rule is puzzling because the licensee is not identified as having neglected to do a safety analysis as a result of the fire, and so presumably performed the proper surveys and evaluations, but is accused of not reporting a non-event. That is, there was no release of material and no personal or public exposures but the licensee is implied to be at fault for not reporting a negative condition. Even under this proposal, while a report might be required under 30.50(b)(4) it does not appear that the more general requirement of 30.50(a) would be triggered. I say "might" because the source apparently did not leak, so was it "damaged"? And, the second example, the UF<sub>6</sub> cylinder, is puzzling because it would appear that a report would be required under 10CFR21. So why is a new rule needed for that situation?

Regardless of these examples NRC presumably desires more direct reporting for some unspecified reason. While I would presume that risk to the public is a general basis for this proposal neither the proposed revisions nor the supporting discussion clearly establish such a link. Perhaps the following comments will serve to elucidate this point.

(1) The cautionary comment in the discussion section to the effect that "Licensees will need to exercise some judgement..." is useless unless it is incorporated directly into the rule. The negative aspects of a citation, associated with not making a report that an inspector later determines was required, are such that most licensees will be very liberal in reporting. This, together with several other aspects of the rule, will result in excessive reporting. Incorporating that phrase into the rule would then by regulation provide a counterbalance by which the licensee could be discriminating in making reports. As written the proposal mandates reporting a multitude of minutia with no basis provided by rule to the licensee to discriminate.

Further, the repeated presence of this cautionary note in the discussion serves to emphasize that the proposed rule is inherently defective in terms of the types of reports desired by NRC. This simply reaffirms the need to modify the proposal. In addition to the changes proposed below, I suggest the following revision to x.50(a): "...that *in the judgement of the licensee* threatens to prevent...".

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(2) 30,40,70.50(a) ("...threaten to prevent..."): This phraseology is so vague that virtually any "every day" event would qualify for reporting. The failure of a hinge on an emergency door, a power outage that affects monitoring equipment or ventilation systems, a door lock that freezes so you cannot verify a lab inventory, all qualify under this rule. Many routine activities are part of the overall program of "protective actions necessary to maintain and verify control of licensed material". A multitude of events can "threaten to prevent" these activities, and hence in the most general sense affect the overall control program. This proposed rule is so vague and general as to be impossible to apply by the licensee.

**Some measure of potential impact to the public is needed as part of this rule.** Clearly, the potential impact of an exposure of one microrem to a few individuals is an event of insignificant concern or interest. If the potential public impact is less than a specified MPC level or level of exposure, then reporting should not be necessary. This sort of event can simply be reviewed at the time of routine NRC inspection.

(3) 30,40,70.50(b)(1): What is a "contamination event"? This term is undefined in 10CFR. Contamination area limits are highly variable from licensee to licensee, but even these are usually justified on the basis of technologically achievable cleanliness levels, not in terms of exposure risk. A typical control level is 200 dpm/100 cm<sup>2</sup>. If a contamination condition in a lab of 300 dpm/100 cm<sup>2</sup> is created, a licensee might choose to simply set up a control area for several days for ALARA reasons rather than do an immediate local decontamination effort. Clearly such low levels of contamination in a restricted area do not represent an event of any significant interest. But under this proposal a report would be required, implying that this is an event of some great significance. For uniformity a quantitative definition of contamination event is needed. I suggest "...an event that could result in an exposure in excess of 200% of the applicable limit, e.g., quarterly/annual external exposure limit or applicable MPC averaged over a year". This would be analogous to the criteria in 10CFR50.72 which was referenced in the discussion supporting this proposal.

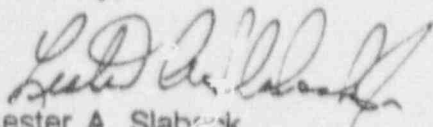
(4) 30,40,70.50(b)(2): The problems with this section are analogous to those of x.50(a), as discussed in (2) above. A quantitative potential impact criteria is needed.

(5) 30,40,70.50(b)(3): What is a "radioactively contaminated individual"? Since a BRC rule does not exist, any detectable radioactive material makes a person "contaminated". Given the sophisticated technology available this can be demonstrated for levels of contamination having truly trivial dose implications. All such persons requiring medical treatment then require a report to NRC. For example, persons working at a heavy water moderated research reactor assuredly have low levels of tritium contamination. Under this rule a report to NRC is required every time they have a minor cut since by policy at most organizations, all injuries require medical attention. This proposal should include a threshold dose or contamination level criteria and should apply only to events where the cause of the contamination and the cause of the injury are causally related.

(6) The discussion on page 19891, second paragraph, first column "Control of Radioactive Material", is in error where it states that 10CFR50.72 applies to reactor licensees. This regulation applies to power reactor licensees. In addition, the parallel drawn to power reactor licensees for events that "...prevent or threaten to prevent...control of licensed material..." is totally inappropriate. The vast majority of licensees have neither the inventory nor the stored energy that could enable a loss of control analogous to that of a power reactor. Hence, this power reactor analogy is not relevant.

In summary, this proposal is severely deficient in a number of technical areas as well as being impossible to reasonably implement by licensees. Beyond that, it is counter-productive in that it dilutes and distracts NRC and licensee attention from real and significant problems or events by giving equal weight to trivial events. Since the revisions necessary to make this an acceptable rule are so extensive, I request that any revision be republished for comment before being considered for final acceptance.

Sincerely,

A handwritten signature in dark ink, appearing to read "Lester A. Slabovick", written in a cursive style.

Lester A. Slabovick  
Supervisory Health Physicist  
Occupational Health & Safety Division

ACNP

DOCKET NUMBER  
PROPOSED RULE PR 20,30,40 & 70  
(55 FR 19890)

1101 Connecticut Avenue, N.W. • Suite 700 • Washington, D.C. 20036

202-429-5120

USNRC

American  
College of  
Nuclear  
Physicians

AC 91-1  
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SNM 15  
The Society  
of Nuclear  
Medicine

'90 JUL 26 P2:58

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

July 27, 1990

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

attn: Docketing and Service Branch  
RIN 3150 - AC91, "Notification of Incidents"  
ER 55 (93):19890-19895, 14 May 1990

Dear Sir:

On behalf of the Society of Nuclear Medicine (SNM) and the American College of Nuclear Physicians (ACNP), which together represent 12,000 health care professionals and support personnel engaged in the practice of nuclear medicine, we wish to respond to the proposed rule on Notification of Incidents. It is our understanding that the Nuclear Regulatory Commission (NRC) feels that the revision of current 10 CFR Part 20 regulations are necessary to better describe reportable events having significant implications for public health and safety, and that the intent of these revisions is to require prompt notification to the NRC of events that would require prompt action by the NRC to protect public health and safety of the environment.

In general, we agree that "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 the licensed material and to protect the public." Certainly, the accidents or potentially dangerous situations described in the Proposed Rule for nuclear reactors and high activity industrial sources warrant such immediate notification. However, with the possible exception of fires, explosions, tornados or other natural disasters that may prevent a medical licensee (i.e., nuclear medicine/ nuclear pharmacy) from maintaining direct control over respectively licensed material, it would be difficult to identify events that would have a significant enough implication for public health and safety so as to require such immediate notification of the NRC by a medical licensee. The radionuclide characteristics and levels of radioactive material encountered in nuclear medicine/nuclear pharmacy facilities are substantially different from those found at nuclear reactor or industrial settings, and pose much less risk to the public or environment. The NRC has not described a single example of an accident of the magnitude implicit in this rule, and we believe that NRC cannot document the occurrence of the type of incidents that would require emergency notification.

The proposed rule includes reporting requirements for some extremely common events included under "Contamination Events," "Personal Injury Events," and "Fires and Explosions." The rule must be fundamentally altered to exclude insignificant radiation events or significant events with insignificant radiation components.

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Letter to Secretary of the Nuclear Regulatory Commission  
July 27, 1990  
Page 2

Of particular concern to the SNM/ACNP is the proposed requirement for licensees to report contamination events if access to an area must be restricted for more than 24 hours because of contamination. The requirement for reporting of these types of events appears to be inconsistent with prior NRC statements, policies, and good radiation safety practice. It is interesting to note that a reporting requirement based on limiting access to an area appears in the proposed rule in consideration of the following statement that appears in the Discussion of the proposed rule: "the periodic loss of operation of a facility is not necessarily related to any potential hazard to the public or environment."

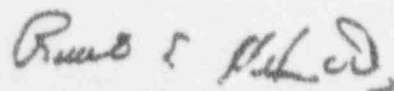
Second, as outlined in the example under Contamination Events, it is common radiation safety practice to isolate, for short periods of time, areas contaminated with medical use isotopes to reduce personnel exposures and to prevent the spread of contamination. Such efforts are consistent with the licensee performing safety related duties necessary to maintain control of the licensed material and to prevent significant implications for public health and safety. Hence, the required reporting of such an event would seem in contradiction to the stated purpose of this proposed rule, i.e., "the reporting of events having significant implications for public health and safety."

We recognize that fires may be significant, but the radiation component involved may be negligible. The insignificant medical isotope contamination that may result from a fire can be managed by an informed radiation safety officer and the fire department.

In the event of personal injury (for example, a laceration to a laboratory worker that requires sutures) the radiation contamination component may be insignificant. This type of event is commonplace and is below regulatory concern.

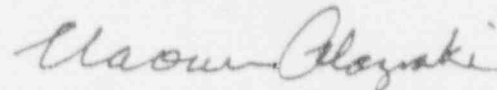
We recommend that NRC revise the prescriptive nature of this regulation for nuclear medicine and nuclear pharmacy and request that significant radiation accidents or situations that are unquestionably hazardous be promptly reported to the NRC. This requires judgement on the part of the licensee; physicians and pharmacists are well trained and experienced in the making of judgements. The NRC requires its licensees to meet training and experience criteria in order to handle insignificant day - to - day events automatically and competently; such insignificant events do not warrant NRC notification.

We recommend that no Notices of Proposed Rulemaking or Proposed Rules be entered into the Federal Register until they are thoroughly reviewed by knowledgeable professionals in nuclear medicine and nuclear pharmacy. That is, we advocate review by the NRC's Advisory Committee on the Medical Uses of Isotopes. This will deter publication of rules of questionable quality or necessity in the future.



Robert E. Henkin, M.D.  
President  
American College of Nuclear Physicians

Sincerely,



Naomi Alazraki, M.D.  
President  
Society of Nuclear Medicine



Formerly MAGNAFLUX Quality Control

DOCKET NUMBER  
PROPOSED RULE **PR 20,30,40 & 70**  
(55 FR 19890)

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USNRC

16  
AC 91-1  
PDR

'90 JUL 27 A9:08

July 23, 1990

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Secretary  
U.S. Nuclear Regulatory Commissions  
Washington, DC 20555

Attention: Docketing and Service Branch

Subject: Proposed rule "Notification of Incidents" comment

Gentlemen:

The proposed regulation changes concerning notification of incidents lacks guidance, clarity, and is somewhat inappropriate when considering industrial radiographic operations. Specifically, guidance and clarification is needed concerning the reports to be made by the licensees when a radiographers' (or radiographers' assistant) pocket dosimeter is discharged beyond its range.

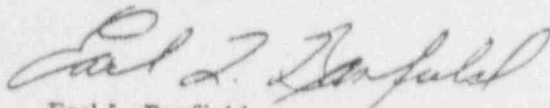
The main area of contention is the definition of what constitutes "threatens to cause" as stated in 10 CFR 20.403 relating to personnel exposures. If it is assumed that any saturated pocket dosimeter represents a threat to cause a certain level of radiation exposure, then what is the assumed exposure level. Licensees will "exercise some judgement" when determining the amount of radiation exposure to the individual(s). They will conduct interviews, perform reenactments, calculate the radiation exposure based on interviews and reenactments, and send other monitoring devices (TLD's film badges) for immediate processing. The results achieved from processing TLD's or film badges is typically not known in a time frame of 24 hours or less. At best you may be able to achieve next day delivery of a badge and processing by the end of the work day. Prior to the receipt of the badge processing results, the licensee may only estimate the radiation exposure based on the initial calculations. The regulations need to be clarified to allow the licensee to make their calculations and subsequently determine reporting needs using the calculations. However, the calculations must be based on factors to the best of the licensees knowledge. These factors included time, distance, shielding, type of isotope, activity, and emissivity of the isotope. These same factors are considered when calculating personnel radiation exposures in the event of lost or damaged dosimetry and therefore, are applicable to calculating all personnel exposures. Without clarification it could be construed that all saturated pocket dosimeters possibly represent personnel exposure requiring notification pursuant to 10 CFR part 20.403 (a) (1). Reporting all saturated pocket dosimeters would not be practical or beneficial. It would conceptually be an economic burden as well, if non-routine inspections by the Commission follow the reports.

An option rather than defining a licensees limits of judgement, would be to permit industrial radiography licensees 48 hours to assess the personnel exposures. This would permit the processing of TLD's and film badges and a more comprehensive assessment of exposure levels.

Representatives of the Commission have stated that industrial radiography licensees need more guidance concerning the reporting of events. These comments are offered with that objective in mind and considering methods to minimize reports of events that do not require a prompt NRC response without excluding any events that do require prompt NRC action.

Very truly yours,

MQS INSPECTION, INC.



Earl L. Banfield  
Corporate Radiation Safety Officer

ELB/lmm:90-216

cc: Earl L. Banfield  
File

DOCKET NUMBER  
PROPOSED RULE PR 20, 30, 40 & 70  
(55 FR 19890)

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USNRC

AC 91-1  
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17

July 23, 1990

90 JUL 27 A9:07

COMMENTS OF OHIO CITIZENS FOR RESPONSIBLE ENERGY, INC. (OCRE")  
ON PROPOSED RULE, "NOTIFICATIONS OF INCIDENTS" (55 FR 19890)  
19890 (MAY 14, 1990)

OCRE supports this proposed rule. There is ample justification for enacting new regulatory requirements to ensure that the NRC will be notified of serious incidents. In addition to the examples given in the notice of proposed rulemaking, in the NRC's Weekly Information Report for the week ending May 18, 1990, there was an incident reported in which Hamilton and Associates failed to report within 24 hours a fire causing significant damage to a radiation device. The proposed rule is necessary to avoid events such as this.

OCRE would suggest that the NRC rephrase the first sentence of proposed 10 CFR 30.50(b)(2) (and parallel sections of parts 40.60 and 70.50) such that the last word, "needed," is deleted and replaced with the phrase, "required to be available and operable." As presently written, this sentence implies that an event need only be reported if a malfunction occurs on an actual demand for the safety function.

While OCRE understands the NRC's intent to minimize the reporting burden on licensees, we are concerned that the proposed rule may unduly truncate the amount of information which the NRC will receive. Licensees should be encouraged to report events which do not meet the criteria of the rule. For example, equipment failures which occur when its safety function is not needed, or when redundant equipment is operable, should be reported to the NRC, and the results disseminated to all licensees, to warn of possible generic failure modes and hazards. Such reports need not be made immediately or within 24 hours, but they should be made to the NRC, perhaps monthly or quarterly.

Respectfully submitted,

*Susan L. Hiatt*

Susan L. Hiatt  
OCRE Representative  
8275 Munson Road  
Mentor, OH 44060  
(216) 255-3158

Addendum: add to list of example events of 10 CFR 30.50(a) (and parallel parts), in addition to fires, explosions, toxic gas releases, the theft or loss of licensed material. This has been a problem; see Information Notices 90-14 and 89-35. *Self.*

*9008150222*

Duke Power Company  
P.O. Box 33198  
Charlotte, N.C. 28242

DOCKET NO. 17  
PROPOSED RULE 20, 30, 40 + 70  
(55 FR 19890)

DOCKETED  
USNRC

AC 91-1  
PDR  
HAL B. Tucker  
Vice President  
Nuclear Production  
(704) 373-4531



DUKE POWER

90 JUL 27 P3:17

18

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

July 24, 1990

The Secretary of the Commission  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Docketing and Service Branch

Subject: Notification of Incidents  
Proposed Rule  
Duke Power Company Comments

Dear Sir:

In the Federal Register (55FR19890) dated May 14, 1990, the Nuclear Regulatory Commission published for comment a proposed rule to amend its regulations to revise licensee reporting requirements regarding the notifications of incidents related to radiation safety.

Duke Power Company has reviewed the proposed rule and has the following comments.

- 1) The NRC is proposing to delete paragraphs (a)(3), (a)(4), (b)(3), and (b)(4) of 10CRF20.403 that deals with loss of operation and damage to property.

Duke agrees with the deletion of these paragraphs.

- 2) 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 excessive and is not necessarily related to any potential hazard to the public or environment. The intent of this requirement is to prevent unnecessary radiation exposure and the spread of contamination. However, the proposed rule is not defined on level of contamination and/or level of exposure dose to the worker or the public and environment as those defined in 20.403. This rule will generate numerous reports of insignificant events to the NRC and will be a burden to the licensee. We expect that we could notify the NRC daily, possibly several times, when a contamination event occurs. For example, any small leakage from a valve or piping causes an unwarranted contamination event, which could easily last more than 24 hours before being repaired and/or cleaned up. Notifying the NRC of insignificant events that have little implication for public health and safety would be a tremendous burden to licensees.

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Secretary of the Commission  
July 24, 1990  
Page 2

This requirement should be deleted or amended to include specific criteria for contamination events that would require prompt action by the NRC to protect public health and safety or the environment.

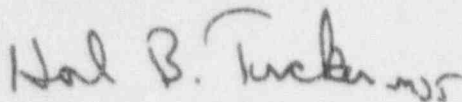
- 3) A reporting requirement would be added for licensees to report within 24 hours events in which equipment necessary to prevent uncontrolled releases of radioactive material, to prevent over-exposures to radiation, or to mitigate the consequences of an accident is disabled or fails to function as designed when it is needed.

The NRC does not specify the nature and severity of the event as defined in 20.403. For example, what amount of uncontrolled release of radioactive material and what level of overexposure is considered a reportable event having significant implications to public health and safety.

This requirement will also generate numerous reports of insignificant events to the NRC. This requirement should be deleted or amended to include specific criteria for the amount of radioactive material released and/or the extent of radiation exposure that would require prompt action by the NRC to protect public health and safety or the environment.

Duke Power Company appreciates the opportunity to comment on the proposed rule and welcome the opportunity to discuss further any comments with the appropriate NRC personnel.

Very truly yours,



Hal B. Tucker

JAR:jar

cc: E.G. LeGette  
M.L. Birch  
GS-811.03

DOCKET NUMBER  
PROPOSED RULE **PR** 20, 30, 40 & 70  
(55 FR 19890)

RE: 90123-N

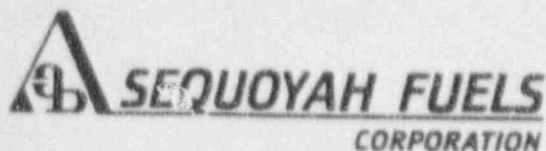
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90 JUL 30 A11:34

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH



July 24, 1990

Certified Mail  
Return Receipt Requested

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Docketing and Service Branch

RE: Proposed Rule on Notification of Incidents

Dear Sir:

Sequoyah Fuels Corporation (SFC) operates a uranium hexafluoride (UF<sub>6</sub>) conversion plant and a UF<sub>6</sub> reduction plant near Gore, Oklahoma. Members of the SFC technical staff have reviewed the subject proposed rule and comments are enclosed herein.

SFC appreciates the opportunity to review the proposed rule. Should you have any questions, please contact me at 918/489-3207.

Best Regards,

A handwritten signature in cursive script, appearing to read 'Lee R. Lacey'.

Lee R. Lacey  
Manager, Regulatory Compliance  
and Quality Assurance

LRL:nv

Enclosure

9008150178

COMMENTS ON PROPOSED NRC RULE:

NOTIFICATIONS OF INCIDENTS

SEQUOYAH FUELS CORPORATION

10 CFR, Parts 30.50; 40.60; and 70.50:

(a) Immediate notification

Comments:

1. The requirement is stated very generally. SFC is concerned that it may be very difficult, in the time frame of an event, to judge whether or not an event meets the following requirement:

... event involving licensed material that prevents or threatens to prevent immediate protective actions necessary to maintain and verify control of licensed material...

Whereas, in hindsight, with all the facts available and ample time to come to a decision, it will be relatively easy for NRC to apply this general criteria to find that the licensee failed to make proper notification.

2. The following language from the discussion section of the proposed rule that establishes a threshold for reportable events should be added to the regulation itself:

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.

(b) Twenty-four hour notification

Comments:

3. Item (b)(1) under this category should allow for planned activities, such as maintenance or decommissioning activities, that could result in restricting access to a contaminated area on a pre-planned basis for an extended period. Excluding these types of activities from the notification requirement would eliminate many notifications that would serve no purpose other than to comply with the regulation.

4. Item (b)(2) as written could result in large numbers of reports on the malfunction of such equipment as portable survey instruments, respirators, fire extinguishers, or even flashlights. Is this NRC's intent? It does not seem so, in light of the examples given in the discussion section of the proposed rule.

**TRTR**

DOCKETED  
USNRC

(55 FR 19890)

20

**NATIONAL ORGANIZATION OF  
TEST, RESEARCH, AND TRAINING REACTORS**

A. Francis DiMeglio, Chairman  
Director, R. I. Atomic Energy Commission  
Rhode Island Nuclear Science Center  
South Ferry Road  
Narragansett, Rhode Island 02882-1197  
Ph (401) 789-9391 FAX (401) 782-4201

90 JUL 30 AM 11:33

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Tawfik M. Raby, National Institute of Standards and Technology

**Executive Committee**

Thomas L. Bauer, University of Texas  
John A. Bernard, MIT, Chairman Elect  
Donald E. Feltz, Texas A & M University  
Arthur G. Johnson, Oregon State University  
J. Charles McKibben, University of Missouri  
Marcus H. Voth, Pennsylvania State University

July 24, 1990

Secretary  
Attn: Docketing and Service Branch  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: Comments on Proposed Changes to 10 CFR 20, 30, 40, and  
70, Notification of Incidents, RIN 3150-AC91, 55 FR 1990

Dear Sir:

The National Organization of Test, Research, and Training Reactors (TRTR) offers the following comments on the subject proposed rule changes.

The appropriateness or need, for these proposed changes is not established in the discussion accompanying the proposed changes. Alleged violation of existing rules is not a justification for establishing new rules. Consider the two examples of violations cited in the text.

In the first example - destruction by fire of a building containing a moisture density gauge - the licensee presumably was aware, based on measurement and analysis, that there was no release of radioactivity. By the time a report to the Nuclear Regulatory Commission (NRC) would be made, the licensee knew that there was neither a significant event nor a potentially significant event. Surely, before issuing a license, the NRC has pre-evaluated the situation where licensed material may be involved in a fire. This type of event is a non-event, perhaps worthy of a courtesy report to the NRC, not requiring a formal report.

The event in the second example is reportable. However the proposed rule will provide no assurance of better reporting performance by a licensee. As with the existing rule, such an event could also go unreported under the proposed rule in violation of the proposed rule.

The alleged violation in the first example came about because of a judgement call by the licensee. The proposed rule changes to not

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eliminate the need "to exercise some judgement in determining when events require an immediate (or 24 hour) NRC notification." The discussion section of the proposed rule emphasizes this point. Nothing in the proposed rule suggests that it will be anymore effective than existing rules in guaranteeing appropriate notifications.

The discussion section of the federal register notice contains many useful examples of reportable events. These examples will not become part of the proposed regulations. This suggests that the proposed NRC action is more suited to a regulatory guide than to a new regulation. Such a guide would provide the examples and information necessary to make correctly the judgement for notifications under the existing regulations.

Concerning the proposed rules themselves, several comments are submitted.

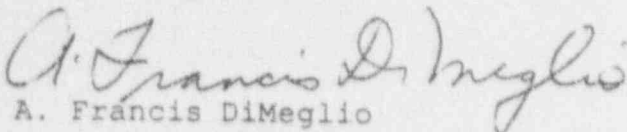
1. The requirement for a 24-hour notification of "any contamination event that restricts access to the contaminated area.....for more than 24 hours" is too vague. In many cases the restricted access is only for a convenience for the licensee. In most cases there would be no hazard to workers or to the public. This requirement must be made more quantitative.
2. The requirement for notification of "any event that requires medical treatment of a radioactively contaminated individual at a medical facility" is also vague. Since there is no attempt to quantify the level of contamination of this reporting requirement, any detectable radioactive material constitutes contamination. A threshold contamination level should be included in the rule.
3. The proposed rule states that "Notification is not required if first aid at a licensee-maintained medical facility for a superficial injury is the only treatment rendered." The word "rendered" should be changed to "required."
4. The proposed rule requires notification for "Any fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material." There should be limits set on the quantity of licensed material, i.e. a threshold established.

Secretary, Docketing and Service Branch  
July 23, 1990  
Page 3

5. The parallels drawn to the reporting requirements for power reactors are totally inappropriate when considering reporting requirements for materials licensees. Materials licensees have neither the inventory nor the stored energy which is associated with a power reactor. The regulatory requirements for power reactors, no matter how well thought out, should not be used as the starting point for regulatory requirements in areas with significantly lower hazards.

The proposed rule, as written, repeatedly requires the use of "judgement calls." This will become a constant source of irritation between licensees and NRC inspectors. To avoid this, licensees will tend to report every event, thereby diluting and diverting the attention of both the licensee and the NRC from more important topics. For the reasons stated above, TRTR recommends the withdrawal or major revision of the proposed rules.

Very truly yours,

  
A. Francis DiMeglio

cc: Document Control Desk

DOCKET NUMBER  
PROPOSED RULE **PR 20, 30, 40 & 70**  
(55 FR 19890)

AC 91-1

PDR

21

DOCKETED  
USNRC

Steve Cima  
782A Sanches St.  
PSF, CA 94129-5709

90 JUL 30 A11:28

17 July 1990

Secretary  
US Nuclear Regulatory Commission  
ATTN: Docketing and Service Branch  
Washington, D.C. 20555

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

SUBJECT: RIN 3150-AC91 Notification Of Incidents (Proposed rule)

My comments on the subject proposed rule follow:

1. The proposed regulations are not appropriate for the following reasons:

- The proposed amendments go far beyond their stated purpose.
- The alternatives to new regulations were not considered.
- These amendments will generate confusion concerning regulatory requirements.
- These amendments would inhibit efforts to maintain exposures ALARA.
- These amendments would discourage comprehensive and ALARA oriented responses to incidents.

a. The proposed amendments go far beyond their stated purpose. The purpose of these amendments is to ensure prompt notification to the NRC of events "... that would require prompt action by the NRC to protect public health and safety or the environment." And yet this amendment requires the reporting of every contamination incident in which access to a contaminated area is restricted for 24 hours. From my own personnel experience I can recall numerous incidents which would have to be reported under this amendment but which would not, by any stretch of the imagination, require prompt action by the NRC. For example:

- Localized areas of contamination in nuclear pharmacies that were covered until the radioisotope had decayed to undetectable levels.
- Iodine therapy patient incidents in which the controlled areas were extended because the patient crossed the control line.
- Iodine patient rooms that remained restricted for extended periods because of excessive contamination.
- Radioactive waste compactors found internally contaminated

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and to which access was controlled.

- Contaminated refrigerators lined with paper until successfully decontaminated.

These are just a few examples of incidents which involved "restricting access to the contaminated area" for more than 24 hours and which would have to be reported under the proposed 30.50(b) and 40.60(b). However reporting these incidents will not further the stated purpose of the proposed regulations.

b. The alternatives to new regulations were not considered. The Draft Regulatory Analysis states that the only alternative to these new rules considered was to do nothing. Prior to generating new regulations the NRC should consider the alternative methods available for clarifying regulatory requirements. These alternatives include:

- Issuing notices to licensees.
- Amending Regulatory Guides.
- Generating new Regulatory Guides.
- Issuing license conditions.
- Requiring licensees to specify how they will comply with a requirement in their license applications.

The statement in the Draft Regulatory Analysis that the NRC has discovered very few unreported incidents casts doubt on the need for additional regulations. The alternatives listed above should at least be considered before new regulations are issued.

c. The amendment will generate confusion concerning regulatory requirements. The discussion provided with the proposed rule-making notes that licensees will need to exercise some judgement in determining when an event requires notification to the NRC. Licensees should not be required to exercise judgement on when-to and when-not-to comply with a regulatory requirement. Regulatory requirements should be written in such a manner that licensees can comply with them at all times. If these are optional reports that may be generated at the discretion of the licensee then these requirements should not be statutory in nature.

d. The proposed amendments will inhibit efforts to maintain contamination levels ALARA. These requirements will encourage licensees to accept higher levels of routine contamination since doing so will minimize the licensee's reporting requirements.

Many licensees currently use action levels for removable contamination that are far below those recommended by the NRC. These licensees frequently restrict access to areas contamination at levels far below the NRC's recommended action levels as a routine part of their ALARA program. The proposed amendments would require these licensees to make unnecessary reports.

The effect would be to encourage licensees to increase their action levels to the NRC's higher limits to avoid making unnecessary reports. Hence the proposed amendments will discourage efforts to maintain contamination ALARA.

e. These amendments would discourage comprehensive and ALARA oriented responses to incidents. Consider the effect of

these proposed amendments on a licensee's response to an incident in which the contamination is significantly above normal levels but still within "acceptable" limits. If the licensee takes no special precautions the matter is closed. But if the licensee implements additional restrictions or protective measures for 24 hours the incident must be reported. These amendments would encourage licensees to restrict access to a contaminated area only if absolutely required to by their license. To continue the current practice of controlling access to even slightly contaminated areas would result in unnecessary reports to the NRC. The proposed amendments would, in effect, "punish" effective ALARA programs by burdening them with more reporting requirements than less stringent ones.

2. Number of reports:

I estimate that large medical licensees fully complying with the proposed amendments would average between 0.5 and 2 reports per quarter. At large non-medical licensees I would expect between 1 and 4 reports per year. These are rough estimates based upon my experiences working at these types of licensees.

3. How to minimize reports that do not require prompt NRC response:

Exempt from the reporting requirements contamination incidents with maximum contamination levels after 24 hours below those specified in Table 2, Reg Guide 8.23.

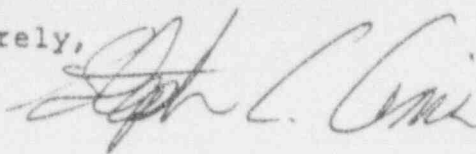
4. Events not covered under the proposed rules that may be of interest to the NRC:

a. Events or situations related to the health and safety of the public or on-site personnel, or the protection of the environment, for which a news release is planned or notification to other government agencies has been or will be made or which has been reported in the news media.

b. Events in which personnel are exposed to radiation, equipment or facilities become contaminated, or radioactive material is lost or released to the environment as the result of deliberate misconduct or criminal actions by any individual(s).

For the reasons stated above I do not believe that the proposed regulations should be implemented. I can be reached at the above address or at (415) 561-2794 (work) or (415) 356-8429 (home) if I can be of any assistance in this matter.

Sincerely,





NUCLEAR MANAGEMENT AND RESOURCES COUNCIL

1776 Eye Street, N.W. • Suite 300 • Washington, DC 20006-2496  
(202) 872-1280

LOCKETED  
USNRC

90 JUL 31 P7:08

Joe F. Colvin  
Executive Vice President &  
Chief Operating Officer

July 30, 1990

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Mr. Samuel J. Chilk  
Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Docketing and Service Branch

RE: Proposed Rule Notifications of Incidents for 10 C.F.R. Parts 20, 30, 40,  
and 70 55 FR 19890 (May 14, 1990)  
Request for Comments

Dear Mr. Chilk:

These comments are submitted by the Nuclear Management and Resources Council, Inc. (NUMARC) in response to the U.S. Nuclear Regulatory Commission's (NRC) request for comments on the proposed rule "Notifications of Incidents" affecting 10 C.F.R. Parts 20, 30, 40, and 70 (55 FR 19890, May 14, 1990).

NUMARC is the organization of the nuclear power industry that is responsible for coordinating the combined efforts of all utilities licensed by the NRC to construct or operate nuclear power plants and of other nuclear industry organizations in all matters involving generic regulatory policy issues and on the regulatory aspects of generic operational and technical issues affecting the nuclear power industry. Every utility responsible for constructing or operating a commercial nuclear power plant in the United States is a member of NUMARC. In addition, NUMARC's members include major architect-engineering firms and all of the major steam supply system vendors.

The proposed rule states that it does not apply to activities reportable under 10 C.F.R. Part 50, however, many commercial nuclear power plants also hold licenses issued under 10 C.F.R. Parts 20, 30, 40 and 70. Further clarification needs to be provided associated with notification requirements for commercial nuclear power reactors. If NRC's intent is to also require commercial nuclear power plant licensees to comply with the requirements of 10 C.F.R. §§ 30.50 (c)(3), 40.50 (c)(3) and 70.50 (c)(3), then we believe the duplication and the increased number of notifications would place an undue burden on both the licensee and the NRC without any added benefit to public or occupational health and safety. Also, the backfit analysis and regulatory analysis needs to be modified if the commercial nuclear power reactor licensees must comply with 10 C.F.R. §§ 30.50 (c)(3), 40.50 (c)(3) and 70.50 (c)(3). Therefore, we request NRC to explicitly exempt commercial nuclear power plants for incidents occurring under these provisions within the protected area of the nuclear power plant. These incidents would already be reported under 10 C.F.R. Part 20, §§ 50.72 and 50.73.

9608/50126

Mr. Samuel J. Chilk  
July 30, 1990  
Page 2

The following additional comments are offered for your review and consideration.

1. The new criteria that will be added to Parts 30, 40, and 70 are identical; therefore the following comment applies to all parts of Title 10 that would be affected. Paragraph (b) (1) specifies that 24 hour notification must be provided for "[a]ny contamination event that restricts access to the contaminated area by workers or the public for more than 24 hours."

This requirement is excessive and, as proposed, not necessarily related to any potential hazard to the public or the environment. The intent of this requirement is to prevent unnecessary radiation exposure and the spread of contamination. However, the proposed rule does not establish any criteria with respect to a level of contamination and/or level of exposure to the worker or the public and the environment as are otherwise established in 10 C.F.R. § 20.403.

As drafted, this rule could generate numerous reports of insignificant events to the NRC. Without specific criteria specifying levels of contamination and/or levels of exposure to the worker or the public, commercial nuclear power plants could be notifying the NRC daily, and perhaps even several times a day, if a very minor contamination event were to occur. For example, any leakage from a valve or piping results in an unwarranted contamination event, which could last more than 24 hours before repairs and/or clean up were to be completed. This type of contamination event would not necessarily result in an adverse impact on public health and safety but would result in a large number of reports being generated at significant cost and with no commensurate benefit to public or occupational health and safety.

This requirement should be deleted or guidance written to include specific criteria established for contamination events that would require prompt action by the NRC to ensure adequate protection of public health and safety. Guidance is also necessary to ensure consistency in enforcement of this regulation. We suggest that the 24 hour notification apply only if an individual could potentially receive a dose in excess of the criteria in the NRC's 1990 Below Regulatory Concern (BRC) policy statement.

2. Proposed paragraph (b) (2) requires 24 hour notification of "[a]ny 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."

Mr. Samuel J. Chilk  
July 30, 1990  
Page 3

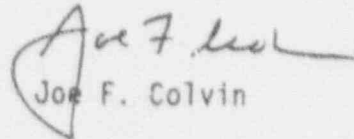
In the proposed paragraph, NRC does not specify the nature and severity of the event as defined in 10 C.F.R. § 20.403. As a result, this will also result in numerous reports of insignificant events to the NRC.

This requirement should be deleted or specific criteria established for these situations that would require prompt action by the NRC to ensure adequate protection of public health and safety. Guidance would also be necessary to ensure consistency in enforcement of this regulation. We suggest that the 24 hour notification apply only if an individual could potentially receive a dose in excess of the criteria in the 1990 BRC policy statement.

In conclusion, we request that companies holding a construction permit or operating license for a commercial nuclear power plant be explicitly exempted from these requirements for activities occurring within the protected area. Also, we strongly encourage the establishment of threshold criteria and suggest the NRC apply the 1990 BRC policy statement for the establishment of such criteria.

We would be pleased to meet with NRC to discuss our comments. Please contact Lynne Fairbent or John Schmitt of my staff if you have any questions.

Sincerely,

  
Joe F. Colvin

JFC:1af



Commonwealth Edison  
1400 Opus Place  
Downers Grove, Illinois 60515

DOCKET NUMBER  
PROPOSED RULE **PR 20, 30, 40 & 70**  
(55 FR 19890)

DOCKETED  
USNRC

23

July 30, 1990

'90 JUL 31 AM 12:25

Mr. Samuel Chilk  
Secretary  
Docketing and Service Branch  
U.S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Subject: Comments Regarding Proposed Rule Revising Reporting Requirements for Incidents Related to Radiation Safety (55 Fed. Reg. 19890; May 14, 1990)

Dear Mr. Chilk:

This letter provides Commonwealth Edison Company's (CECo's) comments on the proposed revisions to 10 CFR parts 30, 40 and 70, relating to the reporting requirements for incidents which involve either radioactive materials or radiation exposures to individuals. The Nuclear Regulatory Commission (NRC) has specifically requested comments on the following issues: the appropriateness of the proposed amendments; the number of reports that licensees expect might be generated yearly; ways to minimize reports of events that do not require a prompt NRC response without excluding events that do require prompt action; and ways to include in the notification requirements events which would require prompt NRC action but are not covered under the proposed amendments.

In general, CECO supports the proposed revisions because they focus attention on significant events involving public health and safety and eliminate reporting requirements for events involving only property damage. CECO also has the following specific comments in response to the issues raised by the NRC.

The number of reports expected and the goal of ensuring that only truly safety-significant events are reported are interrelated. If the proposed regulations are interpreted to require the reporting of only truly safety-significant events, then any number of reports will be reasonable. Some examples of reasonable interpretations follow:

Control of Licensed Material-Reporting events independent of their duration could result in many unnecessary reports. If this requirement is intended to alert the NRC to allow it to assure that proper actions are taken, then no reports should be required for events that are concluded before any meaningful communication with and participation by the NRC is possible.

*Handwritten signature/initials*

July 30, 1990

Contamination Events-The need to report within 24 hours if access to an area will be restricted for more than 24 hours could lead to unnecessary reports motivated by overly conservative estimates of how long an area actually will be inaccessible. To avoid unnecessary over reporting, licensees should not be penalized for failing to report within 24-hours, if a reasonable estimate projected that access would not be lost for more than 24-hours.

Safety Equipment-The multi-stage decision process suggested for making reporting determinations suggests the potential for several areas of disagreement over the circumstances of an event. Determinations should be limited to realistic scenarios in order to avoid a significant number of unnecessary reports.

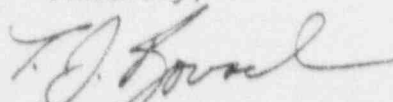
Personal Injury-No notice is required for the treatment of superficial injury at a licensee-maintained medical facility but appears to be required for treatment of the same injury elsewhere. The reason for this distinction should be provided.

Fires/Explosion-Reports should not be required for fires and explosions which result in only superficial damage to licensed materials.

To aid licensees in interpreting the regulations the NRC should provide clear guidance on their interpretation by circulating early event reports with comments on their appropriateness and by providing comparable early analyses of failures to report. In addition, more examples based on stated analyses with reporting requirements in 10 CFR 50.72 should be provided in the form of a NUREG. Finally, a comprehensive review of reporting experience should be conducted two years after the rule is promulgated to identify needs for further guidance and modifications to the requirements.

CECO appreciates the opportunity to comment.

Sincerely,



T.J. Kovach

Nuclear Licensing Manager

acr

DOCKET NUMBER  
PROPOSED RULE **PR** 20, 30, 40 + 70  
(55 FR 19890)

AC 91-1  
PDR  
(24)

DOCKETED  
USNRC

July 30, 1990

90 JUL 31 A9:25

Secretary of the Commission  
Nuclear Regulatory Commission  
Washington, D. C. 20555

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Attention: Docketing and Service Branch

Dear Sirs:

The following comments are filed on behalf of the over 20,000 physician and physicists members of the American College of Radiology (ACR). The comments are on the NRC proposed rule on Notifications of Incidents published in the Federal Register of Monday, May 14, 1990, Page 19890.

The American College of Radiology agrees with the intent of these amendments which is to protect public health and safety of the environment. However, we do have some concerns.

The time requirements for notification - immediate (4 hours) and twenty-four hours - may be somewhat severe and unrealistic in some circumstances.

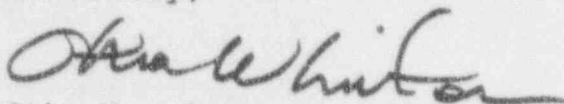
It should be specified that under reportable events which include failure of a teletherapy unit during treatment, that the NRC only has jurisdiction over isotope sources.

Under the notification requirements, we agree that notification should not be required if first aid at a licensee-maintained medical facility for a superficial injury is the only treatment rendered. We believe that there are other such incidents that fit in this category and should be specified. Merely stating that any event that requires medical treatment of a radioactively contaminated individual at a medical facility is not enough.

Requirement (4)(c)(v) under Section 30.50 is that any personnel radiation exposure data that is available be included on the written report. This data may be very difficult to obtain and we believe should be dropped from the notification requirements.

The American College of Radiology appreciates the opportunity to submit comments on this proposed rule. If you have any questions, please feel free to call me.

Sincerely,



Otha W. Linton  
Associate Executive Director

OWL/bl

7008150148

A M E R I C A N C O L L E G E O F R A D I O L O G Y

Amersham Corporation

2636 South Clearbrook Drive  
Arlington Heights, Illinois 60005-4692  
(708) 593-6300

July 27, 1990

DOCKET NUMBER  
PROPOSED RULE **PR** 20,39,40 + 70  
(55 FR 19890)

DOCKETED  
USNRC

(25)  
AC91-1  
PDR

'90 JUL 31 A9:25

**Amersham**

Secretary

U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

ATTN: Docketing and Service Branch

RE: Proposed Rule - Notification of Incidents

Gentlemen:

The following comments are provided by Amersham Corporation in response to the Proposed Rule, RIN3150 - AC91, published in Federal Register, Volume 55, Number 93, on Monday, May 14, 1990, entitled "Notifications of Incidents".

It is agreed that historically some significant events with potential impact on the health and safety of the public and the environment may have gone unreported, and we appreciate the efforts of the Commission to eliminate this problem. Additionally, we agree with the proposed removal of the property damage reporting criteria from the current regulations.

Although the intent of this rule is recognized, we ask that the following comments be considered in further rulemaking.

- 1) Unless the conditions requiring immediate and 24-hour notification are specified in the rule, this regulation would result in burdensome and unnecessary reporting activities that, ultimately, could prove counterproductive with regard to ALARA and protection of the public and environment.

For example, individuals may be subjected to unnecessary exposure in a clean-up of radioactive contamination in an attempt to avoid restricting the area for a 24-hour period and thus to avoid notification. Covering or further restriction of areas already in restricted access locations is a common practice throughout the nuclear industries to avoid unnecessary exposure, particularly in handling short-lived isotopes (such as Tc-99m as cited in the example in the FR publication).

Minor spills can result in partial, temporary restriction of work areas. If all of these were reported, the NRC would be inundated with notifications, potentially exhausting their capacity to deal with incidents of significant concern.

Facilities are licensed based upon the conditions and controls committed to in an application, the level of expertise documented, the quantity, form and nuclides authorized, and their intended use. Judgement, therefore, should continue to be exercised as suggested in the Proposed Rule preamble discussion. However,

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specific levels of contamination which pose significant threats to workers or the public, should be cited in the Proposed Rule under 24-hour notification.

2. Immediate notification criteria have been included in radiological contingency plans required for some by-product material licensees. It is true that some licensees who handle significant amounts of material (especially NARM, and this Proposed Rule is a matter of compatibility with Agreement States) do not have such plans, and the immediate notification requirement for significant incidents by the licensees is justified.

However, the NRC should provide specific classification and reporting guidelines, such as those included in NUREG-0762. We do not suggest the requirement of formal emergency plans submitted to NRC as a license condition. However, specific guidelines are instrumental in the proceduralization of notification and other emergency response activities.

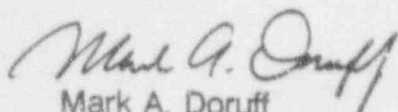
3. The example (No. 3) in the preamble to the Proposed Rule was used to describe the type of incident requiring 24-hour notification. Should a radiography device failure, as described in the example, be subject to the requirement in the Proposed Rule, it is likely to conflict with the notification requirement of a written report within 30 days as included in the new 10 CFR 34.30. In addition, radiographers are currently urged to contact the manufacturer of a device immediately when such a situation occurs, and quality assistance is usually provided within a short period of time to resolve the problem. If a generic flaw is identified in the device itself, the manufacturer currently is obligated under 10 CFR 21 to report this to the Commission.

In conclusion, it is agreed that the intent of this Proposed Rule is justified, and the number of misunderstandings concerning the requirement to report incidents needs reduction. Yet, the above comments should be considered to avoid requirements that would be burdensome, unnecessary, or counterproductive.

As a separate issue, the NRC should take this opportunity to more clearly define the notification requirements concerning the loss of packages of radioactive material. "Loss" of material should be defined, and quantities of specific nuclides justifying notification should be provided.

Alersham Corporation appreciates having the opportunity to comment on this Proposed Rule and is willing to clarify these remarks should the need arise.

Sincerely,



Mark A. Doruff  
Corporate Radiation Safety Officer

UNIVERSITY OF CALIFORNIA, LOS ANGELES

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO

DOCKETED

USMHC



SANTA BARBARA • SANTA CRUZ

90 AUG -1 P4:07

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OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

COMMUNITY SAFETY / RADIATION SAFETY  
2195, WEST CAMPUS MEDICAL BUILDING  
10633 LE CONTE AVENUE  
LOS ANGELES, CALIFORNIA 90024-1765

July 30, 1990.

U.S. Nuclear Regulatory Commission  
The Secretary  
Washington, D.C. 20555

Attention: Docketing and Service Branch

I wish to express my concern about the proposed amendment to 10 CFR 35, and in particular the new Section 30.50 on Notification Requirements. Sub-section (b)(1) requires that notification be made within 24 hours if any contaminating event prevents access to an area "by workers or the public for more than 24 hours".

This is an awkward requirement because a medical center patient room or a university radiochemical laboratory may need decontamination before further use, if so determined by local rules and the radiation safety staff. Any laboratory, because of a completed project, or any patient room, because the radioiodine ablation patient is discharged, must be decontaminated.

It is often not possible to clear either work area within a 24 hour period without the unwanted disruption of other safety activities, laboratory work, or patient care. It is, in my judgment, adequate to allow the licensee to perform such decontamination work in a timely fashion and require that records be maintained. This is now common practice.

I recommend that the regulators responsible for the proposed amendment reevaluate such arbitrary and unnecessary requirements.

My foregoing statement does not reflect any official position by this University, but it does reflect many years of work in the "trenches" of operational radiation safety.

Sincerely yours,

*James E. McLaughlin*  
James E. McLaughlin

cc. Amos Norman  
Randall Hawkins  
Karen Langley

4008150/41

IT NUMBER  
PROPOSED RULE **Ph 20, 30, 40, & 70**  
(55FR19890) DOCKETED  
USNRC



(27)  
AC 91-1  
PDR

Westinghouse  
Electric Corporation

Energy Systems

90 AUG -1 P4:06

Box 355  
Pittsburgh Pennsylvania 15230-0355

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

RS 90-30

July 30, 1990

Mr. Samuel J. Chilk, Secretary  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: Docketing and Service Branch

Reference: Proposed Rulemaking To 10CFR Parts 20, 30, 40 and 70;  
"Notification of Incidents"  
(55FR19890, May 14, 1990)

Dear Mr. Chilk:

The Westinghouse Electric Corporation is pleased to submit these comments in response to the U. S. Nuclear Regulatory Commission's (NRC) request for comments on the proposed rule "Notification of Incidents" affecting 10CFR 20, 30, 40 and 70 (55FR19890; May 14, 1990).

The necessity and appropriateness of reporting significant safety related events, per se, is without question. It is essential that potential generic issues receive broad review to prevent one man's near miss from becoming another man's accident. However, what is to be reportable, and how it is to be reported, is always subject to differences of interpretation and opinion.

The rule as proposed, appears to involve a major change in the number of incidents that will require reporting. Even making a "reasonableness" assumption, one major Westinghouse facility has estimated that the proposed rule would require an additional thirteen to eighteen 24-hour notifications annually. A strict interpretation of the rule could raise this number by an order of magnitude. These incidents would not be of significance in terms of adverse impact on public health and safety, but would result in a large number of reports being generated at significant cost with no commensurate benefit.

Under the Paperwork Reduction Act Statement of the proposed rule, the NRC estimates that the public burden will "average four hours per response." Typically, notifications of this nature would involve several levels of management review and many technical people. Westinghouse estimates that each notification may require 3-man-days of effort.

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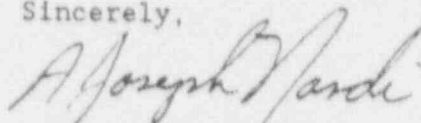
Mr. Samuel J. Chilk, Secretary  
U. S. Nuclear Regulatory Commission

RS 90-30  
July 30, 1990  
Page Two

Specific guidance would be required to assure consistency in interpretation and enforcement of this proposed regulation. This might be accomplished by making the list of reportable events prescriptive, such as the Violation Severity Category supplements in Section IX of Appendix C to 10CFR2.

Additional comments are provided in the Attachment to this letter. Westinghouse would be happy to meet with the NRC to further discuss these comments. Please contact me if you have any questions concerning this response.

Sincerely,

A handwritten signature in cursive script that reads "A. Joseph Nardi".

A. J. Nardi, Manager  
Regulatory Services

dh

Attachment

ATTACHMENT

SPECIFIC COMMENTS ON PROPOSED RULE

NOTIFICATION OF INCIDENTS

(55FR19890, May 14, 1990)

Because the wording of the 10CFR Sections 30, 40 and 70 are identical, these comments will only specifically reference 10CFR30, but would apply to all three sections.

- 1) Section 30.50 (a) requires immediate notification of any event that threatens to prevent immediate protective action. Such wording is ambiguous and subjective. Without specific guidance on the meaning of such a phrase, a licensee would be required to report many incidents that would not otherwise be of actual significance to public health and safety, to assure compliance with the regulations. The concept that the licensee "will need to exercise some judgement in determining when events require an immediate notification" is subject to later interpretation and the potential for citations for non-compliance.
- 2) Section 30.50 (b) requires 24-hour notification of events without providing consideration of health and safety significance of the incident. Examples of such are:
  - a) Reporting of the failure of HEPA filter at a fuel fabrication facility without some limits on severity, seems out of proportion to the other examples of safety equipment related events. Without guidance of the quantity released or the potential for radiation exposure, all such failures would be treated equally whether they result in no significant impact or an over exposure of individuals.
  - b) Section 30.50 (b) (1) requires reporting contamination events that restrict access to the contaminated area by workers for more than 24 hours. No guidance is provided on the level of contamination involved. In general, Westinghouse facilities establish administrative contamination control limits that are restrictive. It appears that reporting would be required if the level of contamination exceeded the administrative controls for greater than 24 hours even if the actual level of contamination was not significant from a health and safety consideration.
  - c) Section 30.50 (b) (3) requires reporting any event that requires medical treatment of a radioactively contaminated individual at a medical facility. These words would require reporting even if the medical treatment was not related to any contamination issues (i.e. treating a severe foot injury of a person who had low levels of contamination on his hands).

SPECIFIC COMMENTS ON PROPOSED RULE

NOTIFICATION OF INCIDENTS

(55FR19890, May 14, 1990)

Page Two

- d) Section 30.50 (b) (4) requires reporting "any fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material." No guidance is provided with respect to the amount of licensed material involved or the significance to public health and safety. In many situations, very small quantities of licensed material are stored in containers or cabinets that would not involve significant risk even if involved in a fire. Another example would be a minor fire in waste container of potentially contaminated items even if subsequent surveys established there was no radiological significance.
- 3) Significant events that are not included in the proposed rule, but that should require NRC action would include Nuclear Criticality Safety events such as:
  - 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.



PROPOSED RULE PR 20, 30, 40 + 70  
July 30, 1990 (55FR 19890)

LOCKEED  
USNRC

(28)  
AC 91-1  
PDR

Secretary,  
United States Nuclear  
Regulatory Commission  
Washington, DC 20555

90 AUG -2 A11:11

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Attention: Docketing & Service Branch

SUBJECT: Notification of Incidents  
Proposed Rule  
55FR19890  
RIN 3150-AC91

We have no quarrel with the general concept of the proposed regulation. There are, however, some questions of interpretation, particularly with respect to damage to the shielding of a nuclear gauge. A strict interpretation of that term seems to indicate that every stuck shutter is a 24 hour reportable incident. If that is the NRC interpretation, we believe it to be unnecessary. We are made aware of about 15 such occurrences each year. When the customer calls us we discuss the best way to secure the gauge and any need for reporting. In nearly all cases, we advise the customer to leave the equipment in place because that is the normal operating condition i.e., in place with the shutter open. Surveys done at installation will already have established the safety in that condition. We then arrange for whatever help is necessary to get the unit safely removed and secured for return and repair or disposal. The possible radiation levels rarely exceed those reportable for an unrestricted area. If they do exceed those levels it is a reportable incident, anyway. We have no problem with shortening the reporting times when the existing exposure limits are exceeded but if they are not exceeded we fail to see the need for a report. Even the current regulation requiring reporting of any shutter failure by General Licensees seems to us to be over reaction. We agree with the proposal for any other shielding damage.

Very truly yours,

*Paul E. Sieck*  
Paul E. Sieck  
V.P. Manufacturing

9008150114

PES:sss

CC: Tom Dewey  
Jim Cartwright  
Jim Loeffler  
Mike Cook

DOCKET NUMBER  
PROPOSED RULE PR 20,30,40 & 70  
(55 FR 19890)

July 30, 1990

DOCKETED  
USNRC

29

AC 91-1  
PDR

90 AUG -3 P2:47

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Attention: Docketing and Service Branch

Gentlemen:

Proposed Rule Change: Notification of Incidents

Thank you for the opportunity to comment on your proposed rule change, relating to incident notifications, published in the May 14, 1990 Federal Register. I am in general support of the proposed rule change but offer the following comments.

Comment (1) General.

The general objectives of the rule change as stated in the Supplementary Information are logical and worthwhile. There are a few sentences which should be removed or revised to remove ambiguities which may arise in a statement of consideration accompanying the final rule change. They are set out in separate comments below.

Comment (2) Uranium Enrichment Plant Applicability.

NRC has issued an Advanced Notice of Rulemaking dealing with the licensing of Uranium Enrichment plants. DOE is cautiously moving toward a Uranium Enrichment Enterprise. Other commercial interests have begun work on an enrichment plant to be licensed by NRC. In NRC's Advanced Notice of Proposed Rulemaking, the staff concluded that the hazards of uranium enrichment plants were no more hazardous than those of existing Hex conversion plants licensed under 10CFR40 or uranium fuel fabrication plants licensed under 10CFR70. Accordingly the statement of considerations and the rule should make it clear that the subject rule change would apply to uranium enrichment plants whether licensed under 10CFR50, 70 or 76. The needed clarification would require a modification of sentence 3 paragraph 5 of the Discussion under Supplemental Information. The sentence should be revised by inserting (1) nuclear power reactor before activities and (2) adding .72 after 10CFR Part 50.

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Comment (3) Independent Spent Fuel Storage (ISFI).

Using analogous arguments as the above, the proposed rule should make clear its applicability to Independent Spent Fuel storage facilities licensed under 10CFR72. The hazards of such facilities are no more significant nor likely than 10CFR70 licensed Hot cells and other irradiated fuels research and development facilities or certain 10CFR30 licensed facilities processing by-product material. Both the statement of considerations and the final rule should accommodate such ISFI facilities.

Comment (4) Contamination Events.

The second sentence of the paragraph following Contamination Events could cause confusion by retaining the ending phrase..."in excess of the radiological conditions normally present". The words normally present should be replaced with specified in 10CFR20.405 or the equivalent new 10CFR20 section.

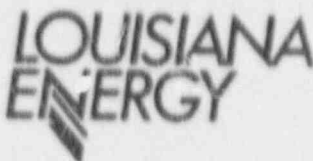
Comment (5) 20.403 Changes.

The changes are desirable and should be expedited to be included with the major revision of 10CFR20 now in its final stages/approval by NRC.

Should you have any questions, please contact me at (714) 975-5585 or at my address, 5 Oakgrove, Irvine, CA 92714.

Appreciatively,

  
William R. Mowry



DOCKETED  
USNRC

Post Office Box 1004  
Charlotte, NC 28201-1004

90 AUG -3 P2:40

July 30, 1990

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Docketing and Service Branch

Re: Louisiana Energy Services  
Proposed Rule Change: Notification of Incidents  
File: MTS-6046-00-2001.01

Gentlemen:

Thank you for the opportunity to comment on the proposed rule regarding notification of incidents at material licensee facilities (55 FR 19890). In general, LES supports the proposed rule. However, we offer the following comments intended to clarify and improve the proposed rulemaking:

- 1) Either the rule or the preamble to the final rule should clarify that the new reporting requirements are applicable to uranium enrichment facilities. These requirements are appropriate for such facilities because the hazards of a uranium enrichment facility are similar to those of facilities licensed in accordance with 10 CFR 40 and 10 CFR 70. The preamble should also reflect that these new reporting requirements should be applied regardless of whether an enrichment facility is licensed in accordance with 10 CFR 50 or 10 CFR 70.

In addition, as the NRC recognized in its advance notice of proposed rulemaking on the regulation of uranium enrichment facilities (53 FR 13276 (1988)), the requirements of 10 CFR 50.72 and 50.73 should not apply to enrichment facilities. It is suggested the preamble to the final rule clarify the new reporting requirements apply rather than those of 10 CFR 50.72 and 50.73.

9008/50090

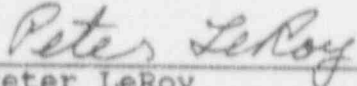
July 30, 1990  
Secretary  
U.S. Nuclear Regulatory Commission  
Page 2  
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- 2) There is no disagreement that the proposed standard for reporting contamination events (i.e., events that require access to be restricted for more than 24 hours because of the contamination). However, the preamble to the proposed rule introduces a potentially confusing secondary standard.

Sentence two of paragraph one of the section "Contamination Events" (55 FR 19891 at column 2) states that this "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 regulatory standard and is inappropriate. It would require reporting of even temporary deviations from "normal" conditions. This language should be deleted from any preamble to the final rule.

Please contact me at (704) 373-8466 if there are any questions concerning this.

Very truly yours,

  
\_\_\_\_\_  
Peter LeRoy  
Louisiana Energy Services  
Licensing Manager

PGL/

July 30, 1990  
Secretary  
U.S. Nuclear Regulatory Commission  
Page 3

XX

bxc: W H Arnold  
R D Belprez (FDI)  
J DiStefano (Urenco)  
J M McGarry (~P&R)  
V M Anthony  
D G Marcelli  
Central Records

VANDERBILT UNIVERSITY

NASHVILLE, TENNESSEE 37232

90 AUG -3 A9:31

TELEPHONE (615) 322-7311



OFFICE  
DOCKING  
Radiation Safety, Health and Environmental Safety Department • 322-2057  
SR.

July 30, 1990

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Docketing and Service Branch

Sirs:

I have several comments to make concerning the proposed rule changes on notification of incidents. I support the objective of attempting to better describe the reportable events (although I am not sure that this has been accomplished since it required several readings of the proposed regulations before I had much of an idea as to what it all meant). I also agree with the reasoning behind the decision to delete the reporting requirements for loss of operation and damage to property.

However, I do have some objections to the present wording of the regulations on reporting requirements for contamination events and personal injury events. The wording is so broad that various planned events would be included (inappropriately in my opinion).

1. For example, access is restricted to rooms containing patients who receive iodine-131 for thyroid cancer therapy since contamination always occurs as ingested I-131 is excreted in perspiration; urine, etc. Everyone entering the room is instructed to wear protective apparel. The room is decontaminated only after the patient leaves, typically in three days. I do not know of any good reason to report these "events" to the NRC, as would be required by 30.50 (b)(1).
2. In a similar vein, one of the functions of a hot cell is to restrict or prevent access to an area which may be contaminated. Do these uses of a hot cell require reporting?
3. Patients who receive nuclear medicine exams often also receive medical treatment while they are in the hospital. Since this is not simply first aid, regulation 30.50 (b)(3) would apparently require notification as a medical treatment event, if the wording in this rule is to be taken literally.
4. Regarding the requirement to report within 24 hours if a contamination event last longer than 24 hours, I don't see how this is physically possible. If one waits to see if the event will last for over 24 hours, the deadline for reporting will have passed.

Sincerely,

John W. Pagel, Director  
Radiation & Environmental Safety Dept.

9008160109



**Newport News Shipbuilding**  
Committed to Quality

4101 Washington Avenue  
Newport News, Virginia 23607 USNR  
(804) 380-2000



90 AUG -3 P2:44

July 30, 1990

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Secretary  
US Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Docketing and Service Branch

Dear Secretary:

The following comments are in response to the proposed changes in 10CFR 30, Federal Register/Vol. 55, No. 93/Monday, May 14, 1990/Proposed Rules.

Modification to paragraph 30.50(b)(2) is recommended because the generalities and broad coverage implied therein will result in inconsistencies among licensees. This fact is recognized in the Supplementary Information where it states "licensees will need to exercise some judgement in determining when an event requires a 24 hour NRC notification."

When addressing industrial radiography, only failures of the actual exposure device and associated equipment designed to prevent overexposure to radiation should require the 24 hour notification. This reflects the intent illustrated by example #3 for reportable events in the Supplementary Information. Otherwise, such things as dropped dosimeters, failed batteries in survey meters and alarming rate meters will cause inconsistent and unnecessary reporting.

Newport News Shipbuilding supports the spirit of the proposed rule changes but does not support unnecessary reporting requirements. Some of the confusion could be eliminated by adding the proposed changes that are specific to industrial radiography to Part 34 rather than Part 30.

Sincerely,

A. J. Moberg  
Chief RSO, License No. 45-09428-02  
Laboratory Services Department

4008150296

HWC/als



E.I. DU PONT DE NEMOURS & CO. (INC.)  
MEDICAL PRODUCTS DEPARTMENT  
July 26, 1990

SECRET NUMBER  
PROPOSED RULE PR 20, 30, 40 + 70  
(55 FR 19890)

DOCKETED  
USNRC

90 AUG -7 A8:26

OFFICE OF SECRETARY  
DOCKETING, SERVICE  
BRANCH

The Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Docketing and Service Branch

Subject: "NOTIFICATION OF INCIDENTS"  
Proposed Rule Published in the Federal Register/Vol. 55, No. 93/  
Monday, May 14, 1990, Pages 19890 to 19895

On behalf of the Greater Boston Manufacturing Division, Medical Products, E.I. DuPont de Nemours and Company, we are pleased to submit the enclosed comments to the above referenced subject.

The Greater Boston Area Manufacturing Division is the major supplier of radioactive materials for biomedical and industrial research and medical applications. We recognize that the proposed rule could apply to facilities like ours and those belonging to our customers. We believe that licensees shall rarely need NRC assistance to address a significant event but agree that the regulations should provide for rapid notification when these rare events occur. Consequently, we agree with the intent of the proposed regulations and agree that changes are needed to clarify the intent and ensure appropriate notifications.

Our main concern with the proposed regulation is that it does not achieve the stated intent to clarify notification requirements. We believe that the proposed regulation is written in a way that will cause over reporting of trivial events and that it will be particularly confusing to small licensees. We recommend that this can be partially rectified by explaining the severity level of notifiable events, and where possible relate them to potential for overexposures which are already included in the notification requirements.

We appreciate the attempt to clarify these regulations. However, we feel that this task can only be effectively realized by a regulatory guide produced to better illustrate the intent of the regulation with a comprehensive list of examples.

We do agree with the proposal to delete the loss of operation and property damage clauses and the new definition of "immediate notification". We believe that these changes are realistic and will permit licensees to better attend to priority issues when responding to an event.

We appreciate the opportunity to comment on this proposed rule and would be glad to furnish further comments and information if needed.

Yours sincerely,

Leonard R. Smith  
Radiation Protection Consultant  
Greater Boston Area Safety and Environmental Affairs

MEDICAL PRODUCTS DEPARTMENT

331 Treble Cove Road, No. Billerica, MA 01862 Telephone 508-667-9531

9008150292

COMMENTS ON PROPOSED RULE:  
"NOTIFICATION OF INCIDENTS, 10 CFR 20, 30, 40 and 70"

1. P 19890, Col 1, Paragraph 1.

"...protect the public health and safety ...generic safety concerns ...prompt NRC action."

We do agree that prompt notification is desirable where situations occur which require prompt NRC action. However, in our experience, although the NRC receives quite a large number of notifications in a given year very few of these result in necessary involvement by the NRC. The proposed rule implies that the NRC is to be notified on common occurrences which are currently well handled by licensees. We recommend that immediate and 24 hour notifications should be limited to potentially serious events where it is necessary for the NRC to intervene to mitigate these effects.

2. P 19890, Col 2, Paragraph 1-3.

In the first example (paragraph 2) it is not clear that the licensee was unable to assess the situation. It is therefore not clear that NRC notification was necessary.

In the second example (paragraph 3) it is clear that the NRC notification might have prevented the ruptured hexafluoride cylinder. However in both examples, it appears that current regulations already address the need to notify the NRC, since in both cases releases and exposures threatened to exceed notification criteria. It seems that in both cases we are dealing with violations of current regulatory requirements and not that the current requirements are inadequate. Consequently we do not think that these two cases, as presented in this proposed rule, justify the need for additional regulations. The inadequacies evident in these two cases may have been obviated by provisions in the licenses especially with respect to their emergency plans.

3. P 19890, Col 2, Paragraph 5 and Col 3, Paragraph 1.

"...loss of operation and damage to property ..."

We agree with the NRC that this current reporting requirement is rarely related to public or environmental hazard and should be deleted. Reporting criteria should be directly related to the realistic potential for causing overexposures.

4. P 19891, Col 1, Paragraph 1.

"...4 hours would be the maximum time allowed for immediate notification."

It appears to us that this requirement is appropriate for most licensees. The need for, and capability to make, notifications in times much less than four hours should be more appropriately addressed in the license.

5. P 19891, Col 1, Paragraphs 3-4.

In these paragraphs it is not clear what the NRC considers to be preventing action by the licensee. There will always be a lapse of time between an event occurring and action taken to respond to it. It could be said that this time lapse will be influenced by the nature and location of the event. These paragraphs imply that all events are immediately reportable. If this is not the intent it might help if further examples were given of events which are reportable and ones which are not.

6. P 19891, Col 2, Paragraph 1.

The purpose of the example involving "crumbling asbestos fibers" is entirely unclear. What has asbestos to do with licensed radioactive material in this paragraph?

7. P 19891, Col 2, Paragraphs 2, 3 and 4.

"...if workers could not secure the licensed material or assess releases because of the fire... if firefighters could not enter the area to combat the fire..."

This paragraph is ambiguous because there normally will be some delay before licensed material is secured, releases assessed and firefighter entry obtained. The need for immediate reportability then depends on how long this delay is or threatens. For this paragraph to be clear the NRC must define the time of the delay to distinguish between immediate reportable and other conditions.

The same clarifications are needed concerning explosions and tornados.

8. P 19891, Col 2, Paragraph 5.

It is not clear what the intent of these paragraphs are. For example "normal conditions" in one restricted area might be no contamination detected but two days in the month detectable contamination might occasionally be determined which is however below any limits requiring prompt decontamination. These paragraphs imply that this trivial situation must be reported to the NRC within 24 hours which is quite unnecessary.

Similarly, in high radiation areas when occasional low level contamination from short-lived material occurs, it is common practice to require extra protective clothing and the use of a temporary local change area until the material has decayed to insignificant levels say 10 days later. The reason for this is to avoid external exposure by carrying out unnecessary decontamination in the presence of a high radiation field. Again, these paragraphs imply that this common sense provision will need to be regularly and promptly reported.

9. P 19891, Col 2, Paragraph 6 and Col 3, Paragraphs 1 and 2.

These examples make sense if the spilled radioactive material is the dominant hazard. However, manufacturing facilities are often designed to safely permit continued operation without prompt decontamination. This is done by switching to redundant equipment or facilities or placing temporary shielding or protective covering. As in the above comment, in manufacturing facilities one is often dealing with competing hazards. It would be poor health physics practice to clean up low level contamination in the presence of significant radiation fields from other sources.

10. P 19891, Col 3, Paragraphs 3 and 4.

For the intent of these paragraphs to be clear, it is necessary to define the severity of the event to be protected against. For example, it is common practice to install charcoal filtration in the exhaust from radioiodine operations. Without filtration, releases might increase from 20 uCi to 40 uCi in a week. These paragraphs imply that an undetected deterioration of these charcoal filters between weekly analyses would be reportable within 24 hours, which is clearly unnecessary.

11. P 19892, Col 1, Items 1, 3, 4, and 5.

We agree that these circumstances should be reported to the NRC but interpret current regulations to already require this since they clearly threaten to cause overexposures. It is not clear why the regulations have to be changed in these cases.

12. P 19892, Col 2, Paragraph 2.

All radiation workers (and members of the public) are contaminated. This paragraph therefore implies that all persons receiving medical treatment must be promptly reported to the NRC. Again, we recommend that the degree of contamination be defined to avoid trivial reports. The example of the puncture wound with a pharmaceutical could be instructive if it were expanded to indicate how much and what pharmaceutical was injected into the wound for this to be considered trivial. For example, the consequences of self injection of the pharmaceuticals  $^{99m}\text{Tc}$  and  $^{90}\text{Sr}$  could be significantly different.

The different requirements for a licensee maintained medical facility and another medical facility is arbitrary because the choice is often made by the individual worker and there is no need for a difference in control especially if the licensee has secured arrangements with a medical facility to accommodate such an event. Again, we recommend that reportability should be based on the potential for overexposure or serious contamination.

13. P 19892, Col 3, Paragraph 2.

"...categorical exclusion in 10 CFR 51.22(c)(2)..."

We do not agree that the conditions of this categorical exclusion are met. The proposed regulation, as written, will have a very large impact on both licensees and the NRC and cannot then be considered of minor nature. We recommend that the NRC is required to make an environmental impact statement prior to promulgation of this regulatory change.

14. P 19893, Col 1, Paragraph 1.

"The proposed rule is being issued in order to reduce misunderstandings by material licensees..."

We understand and agree with this intention but believe it has not been achieved. In order to reduce misunderstandings the NRC will need to clarify timing and severity of events.

15. 10 CFR 30.50 (a).

In this sentence "immediate notification" is implied to mean "as soon as possible but not later than 4 hours after the discovery...". What is meant by "immediate protective actions...", is this also as soon as possible but not later than 4 hours?

What is meant by "any event" and "necessary" in this section? We recommend that definitions are needed to clarify the severity and timing of events and to ensure that interpretation of the regulations will be uniform.

16. 10 CFR 30.50 (b) (1).

"Any contamination event that restricts access... for more than 24 hours."

It is not clear in this section that restriction of access includes changing protocols such as adopting extra protective clothing. Since this is intended according to P 19891, Col 3, Paragraph 1, there is an obvious need to explain this in the regulation or in a regulatory guide. What other situations are considered to restrict access e.g. is the provision of temporary shielding (portable shields, lead apron, lead gloves) considered to be restricted access?

It is normal practice to restrict access in all restricted areas (this is how we define restricted areas). In certain operations the reason for restricting access is to maintain control over contamination. It is common practice to change the restrictions in response to the prevailing conditions. Conditions change normally due to changes in operations and there can also be abnormal changes. Both normal and abnormal change span a range of possibilities. Examples of common practice in the event of abnormal contamination include provision of additional protective clothing, temporary reclassification, posting and access of demarkated zone, provision of additional barriers and change areas, and provision of temporary portable shielding. In facilities (particularly accelerator facilities) where contamination by short-lived radionuclides can co-exist in radiation or high radiation areas, the best radiological control is obtained by considering the severity of the contamination compared to the ambient radiation levels (from other fixed sources) and establishing a system of control according to the radiologically dominating factor. It is therefore common practice to avoid spending the time in a high radiation area to remove abnormal low level contamination when extra restrictions or access, portable shielding extra change area, posting, protective clothing and time (typically several days) for decay provide adequate controlled protection against the contamination.

The regulatory change in this section as written appears to oppose these good radiological practices developed through decades of experience. It is certainly of no benefit to a competent Health Physicist who is responsible for ensuring control of the abnormal contamination to have to split his time with frequent communications with off-site agencies and the preparation of reports.

17. 10 CFR 30.50 (b) (2).

"...mitigate the consequences of an accident... needed."

Practically all operations with radioactive material are provided with equipment installed or on hand to mitigate the consequences of an accident. In any given day it is possible that a few of the tens of thousands of pieces of equipment in place will fail during an operation. The key issue here is what is necessary to prevent serious consequences of the same severity as overexposures. To ensure that licensees and inspectors interpret this requirement appropriately it is necessary to specify what is meant by "needed" and what severity of potential event does the equipment protect against. Does "releases of radioactive material" include environmental releases, loss or theft of material, and airborne or spilled material confined to the workplace?

18. 10 CFR 30.50 (b) (3).

The distinction between a licensee-maintained medical facility and other medical facilities appears arbitrary and the reasons for this distinction should be explained. It seems to us that there should not be a distinction if the licensee has a pre-arranged agreement with a medical facility to accommodate contaminated individuals as is required by certain licensee radiological contingency plans. If, on the other hand, the medical treatment resulted in a loss of control of significant quantities of contamination then it is clearly appropriate that the NRC should be notified. Again, we recommend that these distinctions should be made in the regulation and the severity level specified.

19. 10 CFR 30.50 (b) (4).

We recommend in this section that the quality of radioactive material involved should be specified.

## General Comments

20. We understand that the intent of this proposed regulatory change is to ensure that the NRC is promptly notified of incidents where NRC assistance is needed or which requires the NRC to promptly inform other licensees of newly discovered potentially significant deficiencies. The intent of this regulation should be made more explicit by an introductory section defining the severity of incidents and potential incidents. We recommend that the severity should be equivalent to the overexposure situations, which currently require to be reported, in 10 CFR 20.403 (a), (1) and (2) and (b), (1) and (2).
21. Any special conditions at a licensee's facilities which are not covered by the above considerations could be best addressed by specifying suitable notification requirements in the licensee's radiological contingency plan.
22. We agree with the NRC decision to delete paragraphs that require notification of loss of operations and damage to property. Interruption of operations and property damage are seldom related to potential hazard to workers, the public or the environment. Furthermore, the current regulation encourages licensees to accelerate recovery operations to avoid notification deadlines when it might be better radiological practice to spend more time in planning recovery operations or allow short-lived radionuclides to decay. Current regulations can therefore sometimes cause unnecessary occupational exposure during recovery.
23. The NRC requests comments on the appropriateness of these proposed regulatory changes. We believe that it is entirely appropriate that notification provisions concerning property damage and loss of operations be deleted. We also agree that defining "Immediate Notification" to be as soon as possible and not later than 4 hours after discovery of a relevant incident is more realistic than current regulations. We believe that 4 hour notification is a practical proposition for small licensees and that if it is considered necessary for a licensee to notify specific events more quickly than four hours then this situation is better addressed as a license condition than a regulatory requirement.
24. It is our belief that the proposed regulation, as written, could lead to excessive reporting of many thousands of trivial events per year. This is because the proposed regulation does not explain the timing of events, or define a "release", or explain what is considered "normal" operations. Licensees need clear cut definitions that specify the severity level requiring notification like those currently specified in 10 CFR 20.403 (a), (1) and (2) and (b), (1) and (2).
25. The NRC asks for recommendations on how to minimize reports of insignificant events without excluding events that require prompt NRC action. We recommend that the severity level of events is specified in the regulations and that a regulatory guide is drafted which includes an extensive list of events and their notification status. Also we recommend that the regulatory guide should address the issue of "missing" shipments. About 1% of radioactive shipments get delayed in the transportation system for more than 24 hours. Current regulations do not address this situation but instead allow it to be confused with those rare loss of control situations which need to be reported to the NRC etc..
26. Other events requiring prompt NRC action are sabotage, terrorist action, and bomb threats involving greater than Type A quantity of licensed radioactive material.

3M Medical Department  
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Toxicology

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DOCKET NUMBER  
PROPOSED RULE **PR** 20,30,40 & 70  
(55 FR 19890)

LOCATED  
USNRC

90 AUG -7 A8:25

**3M**

July 30, 1990

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Docketing and Service Branch

Dear Sir/Madame:

Subject: Proposed Rule-Notification of Incidents  
Federal Register Volume 55, No. 93

This letter provides comments on NRC proposed rulemaking on notification of incidents contained in the subject Federal Register. Our comments are based on 3M's activities conducted as a 10CFR30 licensee.

GENERAL COMMENTS

We understand the need for the NRC to receive prompt notification of events to protect public health and safety and the environment. Further, we appreciate the NRC's attempt to specifically define what events need to be reported and which do not. However, we feel that the criteria is still vague. The NRC is trying to cover too many different types of licensees with the one set of criteria. It would be better to establish specific criteria for each type of licensee, i.e., medical, radiography, irradiator, source manufacturing, gauging, well logging, research and development, etc. For example, the NRC has been explicit in defining reporting requirements for reactor licensees in 10CFR50.

We recommend that serious consideration be given to doing the same for at least those by-product material licensees regulated by differing parts of Title 10. For example, criteria for radiography licensee reporting could be provided in 10CFR34, for medical in 10CFR35, for well logging in 10CFR39, for irradiators in 10CFR36, etc. By doing this, reporting events specific to each licensee can be defined, leaving less room for interpretation.

NRC licenses presently require contingency plans for those licensees for whom reportable events are most likely. For these licensees, reportable events are already defined in their contingency plans and the need to promulgate more reporting requirements in 10CFR30 for them is unnecessary. If further criteria is needed for these licensees, it can be included in the plan.

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Secretary, USNRC  
Page 2  
July 30, 1990

For those licensees where reporting requirements cannot be specified in the differing parts of Title 10 or in a contingency plan, consideration should be given to defining such events in the conditions of each licensee's license.

SPECIFIC COMMENTS ON PROPOSED 10CFR30

10CFR30.50(a)

We question the need to immediately report events irrespective of the quantity and type of licensed radioactive materials involved. For example, the present proposal would make it necessary to immediately report a fire that prevents or threatens to prevent maintenance or verification of control of a 10 millicurie Ni-63 electron capture detector source in a gas chromatograph or a 100 millicurie Kr-85 source in a beta gauge. For this type of situation, a 24 hour notification requirement is more than adequate. The proposed regulation should be revised to provide a table, similar to tables used to identify the need for contingency plans, listing the radionuclides and the quantities requiring reporting based on a calculated hazard.

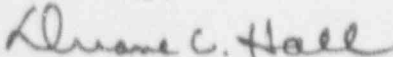
10CFR30.50(b)(1)

We question the need to notify the NRC of all contamination events, especially those occurring in restricted areas. We feel that the proposed regulation is too restrictive. For example, it should not be necessary to report contamination events in restricted areas when facility modifications or decommissioning operations which are known to contaminate such areas are being conducted and for which preparations have been made in advance to protect the workers and the environment.

We recommend that the proposed regulation be revised to permit qualified licensees to have contaminated restricted areas in excess of 24 hours provided that (1) employees are not being exposed to internal and external exposures in excess of the regulatory limits and (2) no releases are being made to unrestricted areas and the environment.

If you have questions regarding our comments, please feel free to contact me at 612/733-7316.

Sincerely,

  
Duane C. Hall, Manager  
Ionizing Radiation  
Health Physics Services

DCH/ckm

DOCKET NUMBER  
PROPOSED RULE **PR** 20, 30, 40 & 70

TENNESSEE VALLEY AUTHORITY

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**JUL 31 1990**

LOCKETED  
USNRC

50 AUG -7 A8:24

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Mr. Samuel J. Chilk, Secretary  
ATTN: Docketing and Services Branch  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Chilk:

NRC PROPOSED RULEMAKING REGARDING 10 CFR 20, 30, 40, and 70 - NOTIFICATION OF INCIDENTS

TVA has reviewed and is pleased to provide comments on the proposed rulemaking noticed in the May 14, 1990 Federal Register (55 FR 19890 - 19895) regarding the notification of incidents related to radiation safety. TVA supports the comments on this proposal made by the Nuclear Management and Resources Council (NUMARC).

Very truly yours,

TENNESSEE VALLEY AUTHORITY

*R. H. Shell*

R. G. Wallace, Manager  
Nuclear Licensing and  
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Mr. Joseph J. Mate  
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*9008/50260*

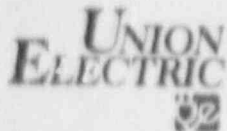
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DOCKET NUMBER  
PROPOSED RULE PR 20, 30, 40 & 70  
(55 FR 19890)

AC 91-1  
PDR (36)

DOCKETED  
USNRC

'90 AUG -7 A8:23



August 1, 1990

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Mr. Samuel J. Chilk  
Secretary  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555  
Attention: Docketing and Servicing Branch

Dear Mr. Chilk:

ULNRC-2261

DOCKET NUMBER 50-483  
CALLAWAY PLANT

PROPOSED RULE NOTIFICATIONS OF INCIDENTS FOR 10CFR PARTS  
20, 30, 40 & 70; 55FR19890 (MAY 14, 1990) REQUEST FOR COMMENTS

These comments are submitted in response to the U.S. Nuclear Regulatory Commission's (NRC) request for comments on the proposed rule "Notifications of Incidents" affecting 10CFR Parts 20, 30, 40 and 70 (55FR19890, May 14, 1990).

Although the proposed rule clearly states that it does not apply to activities reportable under 10CFR Part 50, many commercial nuclear power plants also hold licenses issued under 10CFR Parts 20, 30, 40 and 70, or these parts are incorporated into their Part 50 license. We believe it is the intent of the Staff that the proposed reporting requirements not apply to power reactors. This should be clarified in the language of the rule by referring to the applicable reporting requirements of Part 50 (i.e., 10CFR50.72 and 50.73) for commercial nuclear power reactors. This comment applies to each part of Title 10 that would be affected by the proposed change.

We appreciate the opportunity to comment on this proposed rule. If you have any questions with respect to this comment please contact us.

Very truly yours,

*David Shafer*

David Shafer  
Supervising Engineer,  
Licensing Engineering

DS/sla

4008150287

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bcc: D. Shafer/A160.761  
/QA Record (CA-758)

Nuclear Date

E210.01

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MERCK SHARP & DOHME RESEARCH LABORATORIES

DIVISION OF MERCK & CO., INC.

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DOCKETED  
USNRC

July 27, 1990 AUG -7 A7:56

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Docketing and Service Branch

SUBJECT: Proposed rule: Notification of Incidents

Dear Sir or Madam:

We, at Merck & Co. Inc., are pleased to comment on the proposed rule change to 10 CFR 20.403, Notifications of Incidents. We agree that this section of the regulations warrants revision. The requirements in paragraphs 20.403(a)(4) and 20.403(b)(4) of the present regulations to notify the Commission based on a dollar figure of property damage does not fall within the purpose of Part 20 which is to "establish standards for protection against radiation hazards." We further agree that paragraphs 20.403(a)(1) and (2) and 20.403(b)(1) and (2) which require reporting incidents, which resulted in or may have resulted in exposures to individuals or releases of radioactive materials far in excess of regulatory limits, should remain in Part 20. However, we believe that the proposed 10 CFR 30.50, Notification Requirements, which are based on the occurrence of events which may not involve significant or potentially significant exposures to individuals or releases of licensed material, will not reduce exposures to individuals or to the public and will substantially increase the reporting burden on the licensee. As noted below we believe that the notification requirement should be based on actual or potential hazards to individuals from licensed material. The proposed 10 CFR 30.50 does not meet that standard. In addition the introduction of an incident notification requirement in Part 30, the purpose and scope of which is to prescribe rules for the domestic licensing of byproduct material, appears inappropriate. Licensees have sufficient difficulty interpreting the regulations. The inclusion of regulations into Parts where they do not logically belong adds to licensees confusion, the revised proposed rule on Notification of Incidents should be placed in 10 CFR Part 20.

Comments about specific sections of proposed 10 CFR 30.50:

Paragraph 30.50 (a), (immediate notification) would require immediate notification if there were a fire in a fume hood involving small quantities of licensed materials for example, Liquid Scintillation Counting vials, even though damage to the containers would result in no significant risk to individuals or the environment. Similarly, an explosion in a chemical fume hood or laboratory could cause damage to containers and/or the release of small quantities of radioactive materials with no substantial risk to individuals from the radioactive materials.

The addition of quantity limits to the amount of licensed materials involved in a fire or explosion would ensure that only significant occurrences were reported and not require the expenditure of limited resources on the reporting of insignificant events nor the expenditure of limited resources by NRC staff on the determination of insignificance. A similar statement which sets a threshold for involvement is necessary to ensure that expenditure of limited resources actually protects health and safety and/or the environment.

9008150720

Paragraph 30.50 (b) (1) (Contamination)

This part of the Proposed Rule suffers from the same problem as the parts being deleted. That is, the restricting of access for periods longer than 24 hours in and of itself bears no relationship to the significance of the occurrence. For example, a spill of short-lived materials in a radioactive waste storage area might be handled under the ALARA principles by restricting access and requiring workers entering the area to wear additional anticontamination clothing (shoe covers). To require notification without regard to potential hazard is wasteful of limited resources. If in this example, the event occurred at 4:00 pm on a Friday afternoon, ALARA principles would suggest that cleanup should begin at 8:30 am on the following Monday, some 64.5 hours later, however, the proposed rule would suggest that either the incident be reported, or that individuals be subjected to unnecessary exposure to perform the cleanup. Obviously there is still a need to relate the incident through quantities and hazard of radioactive materials involved to some threshold for reporting rather than duration of restricted access.

Paragraph 30.50 (b) (2) (Safety equipment)

The examples given are indeed significant events, most of which would be reportable under 10 CFR Part 20, however, the Proposed Rule does not relate reporting requirement to potential or actual radiation exposure. For example, chemists routinely use small charcoal filters to prevent the "uncontrolled release of radioactive iodine from iodination reactions". Periodically, these filters may fail to perform properly for one reason or another. While the release of small quantities of radioactive iodine would not currently require notification as an incident, the proposed rule would result in many such reports. It could require us to report every mechanical and procedural failure, regardless of actual or potential personnel exposure.

Paragraph 30.50 (b) (3) (Medical treatment)

The addition of a note to clarify... that if first aid for a superficial injury at a licensed maintained medical facility is the only treatment rendered... addresses the need to relate the potential hazard. However, the hazard addressed (degree of personal injury) has no bearing on the potential of the radiation hazard and can easily result in the reporting of many incidents of no significance to the NRC. For example: a chemist pipetting samples containing small quantities of radioactive material accidentally cuts themselves with the pipette and simultaneously, insignificantly contaminates their hand, and may require medical attention (stitches), not available on the licensee's premises. This situation would generate a 24 hour notification for an event of little significance to the NRC, i.e. a slightly contaminated individual with no removable activity.

Paragraph 30.50 (b) (4) (Fire or explosion)

**Fires and Explosions**

Fires and explosions can and should be rated on the basis of their severity and on the basis of the amount of radioactive materials involved. A small solvent fire during a chemical reaction in a fume hood may damage a container of radioactive materials and still be of no significance to the NRC based on the amount of radioactive materials and/or the potential for radiation exposure. Incident reporting in such instances is a waste of limited resources, but could be improved by setting quantitative threshold limits.

**Summary :**

In summary, while we applaud the NRC's intention of reducing misunderstanding by material licensees as to the events requiring reporting to the NRC, the events identified can easily be insignificant. A small release, small contamination, small injury, small fire etc. which when not related to the actual or potential radiation exposure or quantity of radioactive materials involved as in the Proposed Rule involves the NRC and licensees in unnecessary reporting and evaluations of reports, expending limited resources and obscuring true radiation hazards in a forest of minor events.

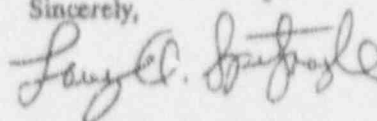
**RECOMMENDATIONS:**

Define significant occurrences in terms of existing dose equivalent (actual or potential exposure greater than the annual dose limit) or concentration limits (actual or potential release of greater than an annually averaged MPC of 1000 times the exempt quantity limits of 10 CFR. Apply the definitions to all parts of the proposed rule. Revision of the proposed rule to include such quantitative threshold limits would simplify incident reporting while still requiring incident reports for all potentially significant events such as those described in the introduction to the proposed rule.

We also recommend the the revised rule on Incident Notification be incorporated in 10 CFR Part 20.

Thank you for the opportunity to comment on the proposed rule.

Sincerely,



Larry A. Spitznagle, Ph.D.  
Associate Director of Health Physics  
Chairman, Radiation Safety Committee

cc: C. Leighton, M.D.

NUMBER  
PROPOSED RULE PR 20,30,40470  
(55 FR 19890)

AC 9-1  
PDR  
38

July 30 1990



U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Docketing Service Branch

Reference: Federal Register, Vol. 55, No. 93, 5/14/90

SUBJECT: COMMENTS ON PROPOSED REPORTING REQUIREMENT RULE CHANGE

Dear Sir:

GE's Nuclear Fuel and Components Manufacturing (NF&CM) has reviewed the proposed rule and submits the following comments for your considerations.

General Comments

The summary section of the proposed rule states this action is needed to ensure that "significant occurrences" are promptly reported to the NRC so they can determine: (1) If licensees have taken appropriate action to protect the public health and safety and (2) if NRC action is required. We concur with the requirements that significant occurrences should be promptly reported to the NRC. We also agree that removing the section from 20.403 that deals with loss of operation and damage to property is appropriate since these requirements are generic and may or may not reflect a true concern.

We believe, however, that the proposed wording in the regulation relative to the frequent use of the word "any" is not consistent with the stated intent of "significant occurrences", and would result in a substantial number of unnecessary reportings.

Licensees are required to comply with regulations and license conditions designed to protect the public health and safety of the workers and the general public. In accordance with this, they must issue and comply with procedures and routines to handle and reasonably mitigate consequences of abnormal occurrences. Therefore, these situations must be accommodated by the licensee's plan and should not require special reporting to the NRC. Quick, effective action by the licensee is the only effective means in dealing with undesirable or abnormal situations and such a plan must be based on pre-planning and licensee ownership. Licensees do not need to be burdened with reporting day-to-day upsets and we believe it is not the NRC's intent. Rather than have the system get bogged down, we should reserve our special communications to the NRC for significant events which warrant additional attention.

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The proposed rule, in certain sections, is highly prescriptive and includes or implies reporting on far too many situations that should not have to be reported -- or at least not on any accelerated schedule. This will result in an overload on the NRC and licensees with little additional benefit. The rule must be modified to eliminate unnecessary reporting so that when significant occurrences do arise the system is able to function to produce the desired effect from both the NRC's and licensee's perspective.

The proposed rule will significantly increase the number of industry reports to the NRC each year and the NRC will be inundated with follow-up 30-day written reports. As a result, there is a potential that the rule change will be counter-productive and produce the opposite result of less worker protection because of the increased reporting of non-significant events.

The following specific comments have been prepared and are presented in the format requested by the NRC.

1) THE APPROPRIATENESS OF THESE AMENDMENTS

As stated in the Summary, the intent of the amendments is to require prompt notification of significant occurrences of material licensee facilities. However, the rule is inappropriately written in implementing the stated objective by using the word "any" when identifying the situations requiring NRC notifications (i.e., any contamination event, any disabled equipment event, any event requiring medical treatment, and any fire or explosion). This inconsistency between the stated objective and the specific wording cannot be easily fixed by just removing the word "any". A mechanism needs to be developed to separate routine or normally expected upsets from significant occurrences or breakdowns of licensee controls. One way to accomplish this would be to provide boundaries or limits describing what makes the event significant. A suggestion is to modify the remaining criteria in 10CFR20.403, to add specific notification criteria for fires, explosions, and offsite medical treatments provided that these can be clearly separated from insignificant events. This would eliminate the need to modify the other sections of the regulations (parts 30, 40 and 70) as proposed.

a) Immediate Notifications

70.50(a) 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 threatens to prevent immediate protective actions necessary to maintain and verify control of licensed material (includes fires, explosions, toxic gas releases, etc).

We believe that the 4-hour immediate notification requirement is appropriate provided that the types of events are in fact "significant occurrences" that warrant rapid communications to the NRC.

The NRC states (FR Page 19891) under "Control of Licensed Material" that an immediate NRC notification is required "if workers could not secure the licensed material or assess released because of the fire." We request the NRC provide further explanation and possibly examples of what securing the material and assessing releases means.

Also, on page FR 19895, the proposed rule 70.50(a) identifies toxic gas releases as an immediate notification requirement. Does this apply to gas releases (such as UF<sub>6</sub>, NOx, hydrogen fluoride and ammonia gases) that periodically occur but are contained and controlled by day-to-day operating procedures. Or, is the intent to require immediate notification of toxic gas releases to the environment that exceed our control or license limits?

It is also unclear what is meant on page FR 19891, middle column, where immediate notification would be required if a licensee was unable to verify whether any releases had occurred. If, for example, storm damage was limited to the loss of building power, one would have no reason to believe that there was a significant release. Yet the words "any releases" may require under a strict interpretation, that any loss of power would require immediate notification.

b) Twenty-Four Hour Notification

70.50(b)(1) Any contamination event that restrict access to the contaminated areas by workers or the public for more than twenty-four hours.

The intent of the proposed changes is to report events having "significant" implications for the public or the environment. This part of the proposed regulation does not adequately qualify the contamination event as to what causes it to have a significant impact to the public or environment. As written, this portion will result in a plethora of reports for situations that in no way threaten employees, the public or the environment.

Many facilities have operational 'contamination' limits that do not exceed their license or NRC limits. When contamination is found above these limits, actions are taken to decontaminate the area or equipment or to restrict use or access until appropriate decontamination actions can be taken. As long as protective measures are taken to prevent the spread of contamination, contamination of personnel or overexposure of personnel, decontamination efforts can wait until they are performed effectively. Although restriction of the affected area may cause an annoyance to some personnel, contamination from these typical restrictions has no significant impact to the health and safety of personnel or the environment.

With the intent of protecting the public and the environment, this 'contamination event' notification should either be deleted from the proposal or be rewritten to generically qualify the event as one having a high probability of seriously affecting the health and safety of personnel or the environment. This would satisfy the intent of the proposal to address significant occurrences while at the same time eliminating applications to day-to-day activities associated with operations of a plant. In addition, placing additional controls on a contaminated area for a period greater than 24 hours does not necessarily imply the contamination event is significant. We suggest the 24-hour criteria be deleted.

70.50(b)(2) Any event in which equipment necessary to prevent uncontrolled release 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.

We request clarification on the words "uncontrolled releases of radioactive material". We believe this is intended to mean releases that threaten to overexpose employees or members of the public. We do not believe the intent is to have to report all spills or breach in equipment that allows material to escape. Examples include a rubber boot splitting open or having a seal fail. However, the way the regulation is written, normal operating perturbations would be subjected to the 24-hour notification and the required 30-day written follow-up report.

We also request clarification of the words "...prevent exposure to radiation and mitigate the consequences of an accident..." This type of statement is extremely open ended and without boundaries, such as those in 20.403, could result in exposures as little as 1 mRem to onsite personnel having to be reported.

Use of the words "when it is needed" is confusing. This type of wording is again open to interpretation. Does this mean the equipment is needed because there is a potential for an uncontrolled release? Or, it was needed because an incident occurred and the equipment was disabled or failed?

The use of the word 'automatically' in the last sentence could cause some confusion and misinterpretation. The sentence already states that if redundant equipment is operating no notification is necessary. The words "and available to automatically" allows licensees to overinterpret the intent of the proposal. We suggest that the last sentence be changed to "...if redundant equipment which performs the required function is operative."

In the example of these types of reportable incidents, on page FR 19892, failure of HEPA filters are used to identify a type of 24-hour notification. Most fuel fabricators use primary and secondary HEPA filter systems for added safety. There are also HEPA filters installed in recirculation systems. As written, the proposed rule would require notification of a "failure" in any system whether or not the failure resulted in a release. In addition, this word "failure" is undefined. HEPA's are by definition 99.97% effective for the removal of 0.3 micron particles. If a system is tested (using a challenge atmosphere such as DOP) and the results show 99.9% effectiveness, is this a reportable failure? Our facility has approximately 150 primary and secondary HEPA filter backs which result in hundreds of filter changes per year. We maintain that the reporting criteria should not be described using the vague word "failure", but rather if there is a significant breakdown in the licensee's capabilities to prevent a release that has a high probability of affecting the health and safety of personnel or the environment.

70.50(b)(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.

We agree that for significantly contaminated individuals treated at an offsite medical facility, such as a local hospital, reporting to the NRC should be required. The proposed rule does not allow the flexibility to send a slightly contaminated individual offsite without NRC notification. We have incorporated and maintained appropriate emergency plans, personnel training and decontamination facilities at a local hospital to specifically cope with the medical treatment of contaminated individuals. Is this considered a licensee maintained facility? This is another example of wording that needs to be clarified in the rule.

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

Again, we agree that for significant fires or explosions the NRC should be notified. However, the specific wording of the proposed rule states that all fires or explosion no matter how small must be reported if there is "damage" to any device, container, or equipment containing licensed material. This is regardless of whether or not an individual was exposed to radioactivity, airborne levels were affected, or material was released. Again, the significance needs to be specifically stated in terms of radiological impact or property damage. A suggestion would be to retain a significant dollar figure in the range of \$10,000 - \$20,000 property damage. This dollar amount would reflect a true concern.

2) THE NUMBER OF REPORTS THAT LICENSEES EXPECT MIGHT BE GENERATED YEARLY

We estimate that had this proposed regulation been in effect in 1989, and had we conservatively interpreted the reporting requirements due to the previously discussed vague terms, approximately 100 additional reports would have been made by our facility to the NRC. Therefore, we believe that the anticipated impact and cost to material licensees in the Draft Regulatory Analyses is grossly understated.

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

Restructure the description of the reportable "significant occurrences" to avoid using the word "any". Also, provide guidance within the regulation to differentiate between significant abnormalities and routine or day-to-day perturbations.

The regulations also need to be worded in such a manner so that key words are clearly defined, possibly in the definition section. Words that may be considered for definition include: Uncontrolled releases, toxic gas (all toxic gases, just those involved in the fabrication process, or toxic gases containing SNM like  $UF_6$ ), and licensee-maintained medical facility.

Also, specific clarification could be provided in the regulations stating that reporting events to the NRC under this section only applies if radioactive material is involved.

4) EVENTS THAT WOULD REQUIRE PROMPT NRC ACTIONS BUT ARE NOT COVERED UNDER THE PROPOSED AMENDMENTS

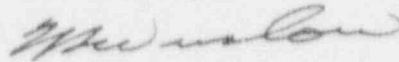
We believe that significant events are adequately addressed in the current regulation.

U.S. Nuclear Regulatory Commission  
July 30, 1990  
Page 7 of 7

If some licensees are misinterpreting the regulation or clarification is required, the NRC should consider other forms of communication such as direct correspondence or I&E Notices, Bulletins or Generic Letters.

If you have any questions or would like to discuss this matter further please call me on (919) 675-5461.

Very truly yours,



T. Preston Winslow, Manager  
Licensing & Nuclear Materials  
Management

/zb

GENERAL ELECTRIC

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Transmittal Cover Sheet

METHOD:

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DATE 7-30-90

TO: Docketing Service Branch - USNRC

EXT.: \_\_\_\_\_ BLDG.: \_\_\_\_\_ M/C: \_\_\_\_\_

NO. PAGES ATTACHED: 4

COMMENTS: \_\_\_\_\_

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FROM: T.P. Winslow

EXT.: (919) 675-5461 BLDG.: J M/C: \_\_\_\_\_

Telecopy No. 8\*292-5879  
(Automatic)

Verify: \_\_\_\_\_

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James L. Smith  
Senior Vice President  
General Manager  
Nuclear Power Generation

July 31, 1990

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PG&E Letter No. DCL-90-200

OFFICE OF SECRETARY  
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U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Re: Docket No. 50-275, OL-DPR-80  
Docket No. 50-323, UL-DPR-82  
Diablo Canyon Units 1 and 2  
Proposed Rule Notifications of Incidents for 10 CFR 20, 30, 40,  
and 70 (55 FR 1989) Requests for Comments

Gentlemen:

In response to the U.S. Nuclear Regulatory Commission's (NRC) request for comments on the proposed rule "Notifications of Incidents" affecting 10 CFR 20, 30, 40 and 70 as published in the Federal Register on May 14, 1990 (55 FR 19890), Pacific Gas and Electric Company (PG&E), submits the following comments.

1. PG&E supports and endorses comments on this proposed rulemaking submitted to the NRC on July 30, 1990, by the Nuclear Management and Resources Council.
2. Although the proposed rule states that it does not apply to activities reportable under 10 CFR 50, many commercial nuclear power plants, including PG&E's Diablo Canyon Power Plant, also hold licenses issued under 10 CFR 30, 40, and 70.
3. The proposed requirement in Paragraph (b)(1) specifying that 24-hour notification must be provided for any contamination event that restricts access to the contaminated area by workers or the public for more than 24 hours is excessive and not necessarily related to a potential hazard to the public or the environment. As drafted, without specific criteria specifying levels of contamination and/or levels of exposure to the worker or the public, this requirement could generate numerous reports of insignificant events to the NRC. This requirement should be deleted or guidance written that includes specific criteria for contamination events requiring prompt action by the NRC to ensure adequate protection of public health and safety. Guidance is also necessary to ensure consistent enforcement of this part of the regulation.
4. The proposed requirement in paragraph (b)(2) specifies a 24-hour notification of 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

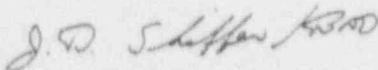
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July 31, 1990

unless redundant equipment is operable and available to automatically perform the required function. In this proposed paragraph, the NRC again does not specify the nature and severity of the event. As a result, this requirement could also result in numerous reports of insignificant events to the NRC. This requirement should be deleted or specific criteria established for equipment failure that would require prompt action by the NRC to ensure adequate protection of worker and public health and safety. Guidance would also be necessary to ensure consistent enforcement of this part of the regulation.

Kindly acknowledge receipt of this material on the enclosed copy of this letter and return it in the enclosed addressed envelope.

Sincerely,



J. D. Shiffer

cc: A. P. Hodgdon  
J. B. Martin  
P. J. Morrill  
P. P. Narbut  
H. Rood  
T. E. Tipton (NUMARC)  
CPUC  
Diablo Distribution

3287S/0084K/EMG/1216



DOCKET NUMBER **PR** 20,30,40+70  
PROPOSED RULE (55 FR 19890)

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DEPARTMENT OF THE NAVY  
OFFICE OF THE CHIEF OF NAVAL OPERATIONS  
WASHINGTON, DC 20350-2000

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PDR

REPLY REFER TO

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OFFICE OF SECRETARY  
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BRANCH

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Docketing and Service Branch

Dear Sir:

The Navy Radiation Safety Committee has reviewed the proposed rule on Notification of Incidents as published in the Federal Register on Monday, 14 May 1990. Our comments are attached.

The Committee opposes adoption of the proposed rule as written. We find it to be overly restrictive in that it does not establish lower bounds or classes of material that could or should be exempted because they do not present a risk to public health and safety. In addition, the immediate notification requirements in the proposed rule are vague and open to differing interpretations. The proposed rule places an additional administrative burden on licensees without, in many cases, better protecting the public health and safety.

Our point of contact for further information is Captain Karl G. Mendenhall, who may be reached at (202)692-5575.

Sincerely,

John P. Collins  
Captain, CEC, U.S. Navy  
Chairman, Navy Radiation  
Safety Committee

Enclosure:  
(1) Comments on Proposed Rulemaking

7008220066

NAVY RADIATION SAFETY COMMITTEE  
COMMENTS ON PROPOSED REVISION TO  
10 CFR 20, 30, 40, 70  
NOTIFICATION OF INCIDENTS

1. The proposed rulemaking does not distinguish lower bounds or classes of material that could or should be exempted because public health and safety are not at risk. Examples of sources for which this reporting should not be required are:

- o Specific and generally licensed check sources, small plated calibration sources, and gauging devices, such as gas chromatographs where the decision to classify the item as exempt, generally licensed, or specifically licensed is a vendor business decision directly related to cost.
- o Depleted uranium used as shielding in containers or as a concentrated mass in munitions. This material does not affect public health or safety in explosions or fire. Extensive tests of depleted uranium munitions show that the depleted uranium stays substantially intact during accidents and does not extensively disperse and contaminate areas. Similar results can be expected for containers and counterweights.

2. Para. 30.50(a), 40.60(a), 70.50(a): The requirements for immediate notification are too vague. The phrases "any event" and "threaten to prevent" are very broad and all inclusive. For example, transportation packaging is designed to survive expected accident conditions without release of radioactive material. Yet any vehicular accident even if minor and clearly not disturbing package integrity, could, by its nature and the particular circumstances, be considered to have "threatened to prevent" immediate action to maintain and verify control of licensed material. Do all such accidents therefore require immediate notification?

3. Para. 30.50(b)(1), 40.60(b)(1), 70.50(b)(1): This requirement is too restrictive and will discourage decay in place of short lived isotopes (e.g., technetium-99m) as a means of preventing unnecessary personnel exposure during decontamination. This is particularly true if the loss of access is during non-working hours. At a minimum, it is recommended that the time for loss of access be changed from "more than 24 hours" to "more than 1 working day."

4. Para. 30.50(b)(2): Recommend equipment failures reported under 10CFR 34.30 be exempt from this requirement. Most

Enclosure (1)

incidents of radiography equipment failure are detected and resolved by the licensee, often within 24 hours, and many of these are due to procedural noncompliance. The NRC Radiography Steering Committee that helped develop the reporting requirements of 10 CFR 34 did not feel such a requirement was necessary.

5. Para. 40.60(b)(3), line 6: Change "significant" to "superficial."