



STATE OF WASHINGTON
DEPARTMENT OF HEALTH
DIVISION OF RADIATION PROTECTION
Airdustrial Center, Bldg. 5 • P.O. Box 47827 • Olympia, Washington 98504-7827

May 5, 1997

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OSP

Paul Lohaus, Deputy Director
Office of State Programs
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

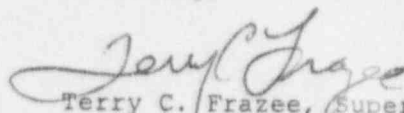
Dear Mr. Lohaus:

Enclosed at your request (letter of April 4, 1997) is a copy of the changes to the Washington decommissioning requirements as filed for permanent adoption with the state Code Reviser's Office. Changes to the text of our regulations are highlighted in the attached document which shows new text with underlining and deleted text with strikeout. There was one typographical correction made in the final rule which was also indicated as a hand written correction on the correspondence to licensees dated January 28, 1997, which was also sent to you.

At this time we do not have available a computer readable format.

If you have any questions regarding the enclosure, please contact me at (360) 753-3561 or via e-mail at tcf0303@hub.doh.wa.gov.

Sincerely,


Terry C. Frazee, Supervisor
Radioactive Materials Section

TCF:amw
Enclosure



RULE MAKING ORDER

(RCW 34.05.360)

CR-103 (4/25/95)

Agency: Department of Health

(1) Date of Adoption:

3/6/97

- ☒ Permanent Rule
☐ Emergency Rule
☐ Expedited Repeal

(2) Purpose:

The amendments update a radioactive materials licensee's required records, timeliness, and funding mechanisms to bring state rules into conformity with Federal Regulations issued by the Nuclear Regulatory Commission.

(3) Citation of Rules Affected by this order:

Repealed:

Amended: 246-232-060 & 246-235-075

Suspended:

(4) Statutory authority for adoption:

Other Authority: 70.98.050 RCW & 70.98.080 RCW

PERMANENT RULE ONLY

Adopted under notice filed as WSR 97-03-26 on 01/22/97 (date).

Describe any changes other than editing from proposed to adopted version:

Corrected cross-referencing error in WAC 246-232-060 (8)

EMERGENCY RULE ONLY

Under RCW 34.05.350 the agency for good cause finds:

- ☐ (a) That immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.
- ☐ (b) That state or federal law or federal rule or a federal deadline for state receipt of federal funds requires immediate adoption of a rule.

Reasons for this finding:

EXPEDITED REPEAL ONLY

Under Preproposal Statement of Inquiry filed as WSR _____ on _____ (date).

(5.3) Any other findings required by other provisions of law as precondition to adoption of effectiveness of rule?

☐ Yes ☒ No If Yes, explain:

(6) Effective date of rule:

- | Permanent Rules
or Expedited Repeal | Emergency Rules |
|--|--|
| <input checked="" type="checkbox"/> 31 days after filing | <input type="checkbox"/> Immediately |
| <input type="checkbox"/> Other (specify) _____ | <input type="checkbox"/> Later (specify) _____ |

*(If less than 31 days after filing, specific finding in 5.3 under RCW 34.05.380(3) is required)

NAME (TYPE OR PRINT)

Bruce Miyahara

SIGNATURE

TITLE

Secretary, Department of Health

DATE

4/1/97

CODE REVISER USE ONLY

CODE REVISER'S OFFICE
STATE OF WASHINGTON
FILED

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TIME

11:58

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WSR

97-03-26

(COMPLETE REVERSE SIDE)

Note: if any category is left blank, it will be calculated as zero.
No descriptive text.

Count by whole WAC sections only, from the WAC number through the history note.
A section may be counted in more than one category.

The number of sections adopted in order to comply with:

Federal statute:	New	-----	Amended	-----	Repealed	-----
Federal rules or standards:	New	-----	Amended	2	Repealed	-----
Recently enacted state statutes:	New	-----	Amended	-----	Repealed	-----

*(current calendar year)

The number of sections adopted at the request of a nongovernmental entity:

New	-----	Amended	-----	Repealed	-----
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The number of sections adopted on the agency's own initiative:

New	-----	Amended	-----	Repealed	-----
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The number of sections adopted in order to clarify, streamline, or reform agency procedures:

New	-----	Amended	-----	Repealed	-----
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The number of sections adopted using:

Negotiated rule making:	New	-----	Amended	-----	Repealed	-----
Pilot rule making:	New	-----	Amended	-----	Repealed	-----
Other alternative rule making:	New	-----	Amended	2	Repealed	-----

*No changes from
rule review
in March 1997*

AMENDATORY SECTION (Amending Order 245, filed 2/21/92, effective 3/23/92)

WAC 246-235-075 Financial assurance and recordkeeping for decommissioning. (1) Each applicant for one of the following licenses shall submit a decommissioning funding plan as described in this section:

(a) A specific license authorizing receipt of radioactive waste for the purpose of volume reduction, repackaging or interim storage.

(b) Receipt of contaminated articles, scrap material, equipment, or clothing to be decontaminated at the licensee's facility.

(c) A specific license authorizing the possession and use of radioactive material of half-life greater than one hundred twenty days and in quantities for unsealed material exceeding 10⁶ times and for sealed forms exceeding 10⁴ times the applicable quantities set forth in WAC 246-221-300 Appendix B (for a combination of isotopes the unity rule applies. A decommissioning funding plan will be required if R is greater than 1, where R is defined as the sum of the ratios of the quantity for sealed and unsealed forms of each isotope compared to the applicable value derived from WAC 246-221-300).

(d) A specific license authorizing possession and use of source material in readily dispersible form and in quantities greater than 10 millicuries.

(2) Each decommissioning funding plan shall contain:

(a) A cost estimate for decommissioning facilities impacted by the activities authorized in the specific license.

(b) A description of the method of assuring funds for decommissioning.

(c) A schedule for adjusting cost estimates and associated funding levels periodically over the life of the facility or facilities.

(d) A description of methods and general procedures for performing facility decontamination, maintaining security, and performing a final radiation survey.

(e) A commitment to clean up accidental spills promptly and to begin decommissioning of the facility or facilities within twelve months of ceasing operation involving radioactive material.

(3) Each cost estimate for decommissioning shall include:

(a) A description of the facility and areas within the facility likely to require decommissioning as a result of routine operation.

(b) Anticipated labor, equipment and material costs.

(c) Anticipated waste volume.

(d) Anticipated packaging, transportation and waste disposal costs.

(e) An assessment of costs associated with an accident involving licensed material.

(4) Financial assurance for decommissioning shall be provided by one or more of the following methods:

(a) Prepayment. Prepayment is the deposit of sufficient funds to pay decommissioning costs. Funds shall be deposited prior to the start of operation into an account segregated from licensee assets and outside the licensee's administrative control. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities.

(b) A surety method, insurance, or other guarantee method. These methods guarantee that decommissioning costs will be paid should the licensee default. A surety method may be in the form of a surety bond, letter of credit, or line of credit. Any surety method or insurance used to provide financial assurance for decommissioning must contain the following conditions:

(i) The surety method or insurance shall be open-ended or, if written for a specified term, such as five years, shall be renewed automatically unless ninety days or more prior to the renewal date, the issuer notifies the department, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance shall also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the department within thirty days after receipt of notification of cancellation.

(ii) The surety method or insurance shall be payable to a trust established for decommissioning costs. The trustee and trust shall be acceptable to the department. Acceptable trustees include an appropriate state or federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(iii) The surety method or insurance must remain in effect until the department has terminated the license.

(c) An external sinking fund in which deposits are made at least annually, coupled with a surety method or insurance, the value of which may decrease by the amount being accumulated in the sinking fund. An external sinking fund is a fund established and maintained by setting aside funds periodically in an account segregated from licensee assets and outside the licensee's administrative control. The total amount of funds in the external sinking fund shall be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities. The surety or insurance provisions shall be as stated in subsection (4)(b) of this section.

(d) In the case of state or local government licensees, a statement of intent containing a cost estimate for decommissioning and indicating that funds for decommissioning will be obtained when necessary.

(e) Other methods of financial assurance as approved by the department. The department may approve other financial mechanisms submitted by the applicant or licensee provided the alternate method meets, at a minimum, the requirements of 10 C.F.R. 30.35 and associated U.S. Nuclear Regulatory Commission guidance.

(5)(a) The department shall review each decommissioning funding plan prior to license issuance and prior to license renewal.

(b) The applicant or licensee shall incorporate department comments into its cost estimate and shall revise its financial surety accordingly.

(c) Applicants shall obtain the appropriate financial assurance as approved by the department prior to receipt of licensed material. The department may issue a new license if the applicant agrees to comply with the decommissioning funding plan as approved. If the applicant defers execution of the financial instrument until after the license has been issued, a signed original of the financial instrument obtained to satisfy the requirements of this section shall be submitted to the department before receipt of licensed material.

(d) Holders of licenses issued on or before the effective date of this rule shall submit a decommissioning funding plan to the department by April 1, 1993. Licensees shall implement the financial assurance requirements within thirty days of receiving department approval of the decommissioning funding plan. Licensees shall submit copies of the financial surety within thirty days of securing the surety and annually thereafter.

(6) Each person licensed under this chapter shall keep records of information important to the safe and effective decommissioning of the facility in an identified location until the license is terminated by the department. If records of relevant information are kept for other purposes, reference to these records and their locations may be used. Information the department considers important to decommissioning consists of:

(a) Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records shall include any known information on identification of involved nuclides, quantities, forms, and concentrations.

(b) As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored, and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations.

(c) Except for areas containing only sealed sources (provided the sources have not leaked or no contamination remains after any leak) or depleted uranium used only for shielding or as penetrators in unused munitions, or radioactive materials having only half-lives of less than sixty-five days, a list contained in a single document and updated every two years, of the following:

(i) All areas designated and formerly designated as restricted areas as defined under WAC 246-220-010;

(ii) All areas outside of restricted areas that require documentation under (a) of this subsection;

(iii) All areas outside of restricted areas where current and previous wastes have been buried as documented under WAC 246-221-230 (8)(a); and

(iv) All areas outside of restricted areas which contain material such that, if the license expired, the licensee would be required to either decontaminate the area to unrestricted release levels or apply for approval for disposal under WAC 246-221-180. Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.

AMENDATORY SECTION (Amending Order 184, filed 7/24/91, effective 8/24/91)

WAC 246-232-060 Termination of licenses and decommissioning of sites and separate buildings or outdoor areas. (1) Each specific licensee shall immediately notify the department in writing when the licensee decides to permanently discontinue all activities involving materials authorized under the license and request termination of the license. This notification and request for termination of the license must include the reports and information specified in subsection (3) (c) and (d) of this section. The licensee is subject to the provisions of subsections (3) and (4) of this section, as applicable.

(2) No less than thirty days before the expiration date specified in a specific license, the licensee shall either:

(a) Submit an application for license renewal under WAC 246-235-050; or

(b) Notify the department in writing if the licensee decides not to renew the license.

(3) If a licensee does not submit an application for license renewal under WAC 246-235-050, the licensee shall on or before the expiration date specified in the license:

(a) Terminate use of ~~((byproduct))~~ radioactive material;

(b) Properly dispose of ~~((byproduct))~~ radioactive material;

(c) Submit a completed departmental form "Certificate of disposition of radioactive material" or equivalent; and

(d) Submit a radiation survey report to confirm the absence of radioactive materials or establish the levels of radioactive contamination, unless the department determines a radiation survey report is not necessary.

(i) If no radioactive contamination attributable to activities conducted under the license is detected, the licensee shall submit a certification that no detectable radioactive contamination was found. If the information submitted under this paragraph and subsection (3) (c) and (d) of this section is adequate, the department will notify the licensee in writing that the license is terminated.

(ii) If detectable levels of radioactive contamination attributable to activities conducted under the license are found, the license continues in effect beyond the expiration date, if necessary, with respect to possession of residual radioactive material present as contamination until the department notifies the licensee in writing that the license is terminated. During this time, the licensee is subject to the provisions of subsection (4) of this section. In addition to the information submitted under subsection (3)(c) and (d) of this section, the licensee shall submit a plan for decontamination, if necessary.

(4) Each licensee who possesses residual ~~((byproduct))~~ radioactive material under subsection (3)(d)(ii) of this section, following the expiration of the facility and/or equipment date specified in the license, shall:

(a) Be limited to actions, involving radioactive material related to decontamination and preparation for release for unrestricted use; and

(b) Continue to control entry to restricted areas until they are suitable for release for unrestricted use and the department notifies the licensee in writing that the license is terminated. The guidance contained in WAC 246-232-140, Schedule D, shall be used in making this determination.

(5) Each general licensee licensed under the provisions of WAC 246-233-020(8), shall immediately notify the department in writing when the licensee decides to discontinue all activities involving radioactive materials authorized under the general license. Such notification shall include a description of how the generally licensed material was disposed and the results of facility surveys, if applicable, to confirm the absence of radioactive materials.

(6) Within sixty days of the occurrence of any of the following, each licensee shall provide notification to the department in writing of such occurrence, and either begin decommissioning its site, or any separate building or outdoor area that contains residual radioactivity so that the building or outdoor area is suitable for release in accordance with department requirements, or submit within twelve months of notification a decommissioning plan, if required by subsection (10)(a) of this section, and begin decommissioning upon approval of that plan if:

(a) The license has expired or has been revoked by the department; or

(b) The licensee has decided to permanently cease principal activities, as defined in this section, at the entire site or in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with department requirements; or

(c) No principal activities under the license have been conducted for a period of twenty-four months; or

(d) No principal activities have been conducted for a period of twenty-four months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with department requirements.

(7) As used in this section, principal activities means activities authorized by the license which are essential to achieving the purpose(s) for which the license was issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

(8) Coincident with the notification required by subsection (6) of this section, the licensee shall maintain in effect all decommissioning financial assurances established by the licensee pursuant to WAC 246-235-075 or as required by this section. The amount of the financial assurance must be increased, or may be decreased, as appropriate, to cover the detailed cost estimate for decommissioning established pursuant to subsection (10)(d)(v) of this section. Following approval of the decommissioning plan, a licensee may reduce the amount of the financial assurance as decommissioning proceeds and radiological contamination is reduced at the site with the approval of the department.

(9) The department may grant a request to extend the time periods established in subsection (6) of this section if the

department determines that this relief is not detrimental to the public health and safety and is otherwise in the public interest. The request must be submitted no later than thirty days before notification pursuant to subsection (6) of this section. The schedule for decommissioning set forth in subsection (6) of this section may not commence until the department has made a determination on the request.

(10) (a) A decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the department and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:

(i) Procedures would involve techniques not applied routinely during cleanup or maintenance operations;

(ii) Workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

(iii) Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(iv) Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(b) The department may approve an alternate schedule for submittal of a decommissioning plan required pursuant to subsection (6) of this section if the department determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public health and safety and is otherwise in the public interest.

(c) Procedures such as those listed in (a) of this subsection with potential health and safety impacts may not be carried out prior to approval of the decommissioning plan.

(d) The proposed decommissioning plan for the site or separate building or outdoor area must include:

(i) A description of the conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan;

(ii) A description of planned decommissioning activities;

(iii) A description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;

(iv) A description of the planned final radiation survey;

(v) An updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning;

(vi) A description of the physical security plan and material control and accounting plan provisions in place during decommissioning;

(vii) For decommissioning plans calling for completion of decommissioning later than twenty-four months after plan approval, the plan shall include a justification for the delay based on the criteria in subsection (12) of this section.

(e) The proposed decommissioning plan will be approved by the department if the information therein demonstrates that the decommissioning will be completed as soon as practicable and that the health and safety of workers and the public will be adequately protected.

(11) (a) Except as provided in subsection (12) of this section, licensees shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than twenty-four months following the initiation of decommissioning.

(b) Except as provided in subsection (12) of this section, when decommissioning involves the entire site, the licensee shall request license termination as soon as practicable but no later than twenty-four months following the initiation of decommissioning.

(12) The department may approve a request for an alternative schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the department determines that the alternative is warranted by consideration of the following:

(a) Whether it is technically feasible to complete decommissioning within the allotted twenty-four-month period;

(b) Whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted twenty-four-month period;

(c) Whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay;

(d) Whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and

(e) Other site-specific factors which the department may consider appropriate on a case-by-case basis, such as the regulatory requirements of other government agencies, lawsuits, ground water treatment activities, monitored natural ground water restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

(13) As the final step in decommissioning, the licensee shall:

(a) Certify the disposition of all licensed material, including accumulated wastes, by submitting a completed certificate of disposition of radioactive material or equivalent information; and

(b) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey unless the licensee demonstrates that the premises are suitable for release in some other manner. The licensee shall, as appropriate:

(i) Report levels of gamma radiation in units of millisieverts (microrentgen) per hour at one meter from surfaces, and report levels of radioactivity, including alpha and beta, in units of megabecquerels (disintegrations per minute or microcuries) per one hundred square centimeters--removable and fixed--for surfaces, megabecquerels (microcuries) per milliliter for water, and becquerels (picocuries) per gram for solids such as soils or concrete; and

(ii) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(14) Specific licenses, including expired licenses, will be terminated by written notice to the licensee when the department determines that:

(a) Radioactive material has been properly disposed;

(b) Reasonable effort has been made to eliminate residual radioactive contamination, if present; and

(c)(i) A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with department requirements; or

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with department requirements.

(15) Specific licenses for uranium and thorium milling are exempt from subsections (6)(d), (9) and (10) of this section with respect to reclamation of tailings impoundments and/or waste disposal areas.

APR - 4 1997

Mr. Terry C. Frazee, Supervisor
Radioactive Materials Section
Department of Health
State of Washington
P.O. Box 47827
Olympia, WA 98504-7827

Dear Mr. Frazee:

We have reviewed the proposed changes to the Washington decommissioning requirements, as contained in the letter to all Radioactive Materials Licensees dated January 28, 1997. The proposed rules were reviewed by comparison to the equivalent NRC regulations in 10 CFR Part 30 and 40.

As the result of the review we have no comments. Under our current procedure, a finding that a rule meets the compatibility requirements may only be made based on a review of the final text of the rule. However, we have determined that if the proposed rules were adopted without significant change, they would be compatible.

We request that when the proposed rules are adopted and published as final rules, a copy of the "as published" rules be provided to us for review. As requested in our All Agreement States Letter SP-96-027, "Request to Highlight Changes to Agreement State Regulations Submitted to NRC for Compatibility Review" (March 1, 1996), please highlight the final changes and send one copy in a computer readable format, if possible.

If you have any questions regarding the comments or any of the NRC rules used in the review, please contact me or Mr. Richard Blanton of my staff at (301) 415-2322.

Sincerely,

Original Signed by
Patricia Larkins for

Paul H. Lohaus, Deputy Director
Office of State Programs

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Distribution:
DIR RF (7S-074)
Washington File

DCD (SP08)

PDR (YES)

DOCUMENT NAME: G:\RLB\7S074LTR.RLB

*See previous concurrence.

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

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STATE OF WASHINGTON

DEPARTMENT OF HEALTH

DIVISION OF RADIATION PROTECTION

Airustrial Center, Bldg. 5 • P.O. Box 47827 • Olympia, Washington 98504-7827

March 13, 1997

Paul Lohaus, Deputy Director
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Lohaus: *Paul*

This is to document the most recent rulemaking activity for the Radioactive Materials Section. Enclosed is a copy of my January 28, 1997 memo to All Radioactive Materials Licensees notifying them of proposed changes relating to decommissioning requirements. The Public Hearing was held February 25 and the proposed rules have been forwarded to upper management for adoption.

The following NRC rules which have been determined to be matters of compatibility are covered in this rulemaking:

Additional decommissioning records (58 FR 39628) - this requirement is found in amended WAC 246-235-075(6)(c). Subsequent changes incorporated in 60 FR 38235 and 59 FR 36026 had been taken into account.

Self guarantee mechanism (58 FR 68726) - no action was taken on this compatibility item because it is covered by our WAC 246-235-075(4)(e) which provides our licensees the option of "other methods that meet Part 30.35". Therefore we meet this compatibility item because the self guarantee mechanism is allowed.

Timeliness in decommissioning (59 FR 36026) - this issue is covered in the amendment to WAC 246-232-060, subsections (6), (7) and (9) through (15).

Decommissioning funding clarification (60 FR 38235) - this clarification can be found in WAC 246-235-075(5)(c) and WAC 246-232-060(8).

I have been informed that you have not been receiving automatic copies of all our mass mailings. Therefore this is the first opportunity you will have had to review the proposed rulemaking needed to maintain compatibility. We will take steps to assure that future essential mailings are forwarded to you. In the meantime we would appreciate your review of the enclosed information and any comments you may have relative to their acceptability in meeting your expectations for the rules in question.

If you have any questions or any comments you can reach me at address given above, or by phone at (360) 753-3461, by fax (360) 753-1496, or by e-mail at tcf0303@hub.doh.wa.gov.

Sincerely,

L-4-2 WA

Terry

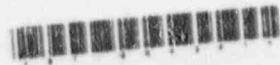
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Terry C. Frazee, Supervisor
Radioactive Materials Section

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CC: Jack Horner

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STATE OF WASHINGTON

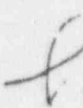
DEPARTMENT OF HEALTH

DIVISION OF RADIATION PROTECTION

Airdustrual Center, Bldg. 5 • P.O. Box 47827 • Olympia, Washington 98504-7827

January 28, 1997

To: All Radioactive Materials Licensees

From:  Terry C. Frazee, Supervisor
Radioactive Materials Section

Subject: PUBLIC HEARING ON RULE FOR DECOMMISSIONING

On February 25, 1997, the Department will conduct a public hearing to consider a proposed rule on license termination and related requirements for decommissioning major facilities. The hearing will be held at 10 am in the conference room of the Division of Radiation Protection, Building 5, Airdustrual Center, 7171 Clearwater Lane, Tumwater, WA. Notification of this hearing is also being published in the Washington State Register on February 5, 1997.

The proposed rule is a collection of several federal rule changes which have been deemed "a matter of compatibility" for the Agreement States by the U. S. Nuclear Regulatory Commission. The proposed rule relates to decommissioning of facilities licensed to possess large quantities of radioactive materials. The proposed rule 1) requires certain licensees to prepare and maintain additional documentation identifying all areas where radioactive materials or equipment were stored or used, where unusual occurrences or spills happened, or where waste was buried (this practice was out-lawed in 1980 but old licensees still need to keep records of pre-1980 burials); 2) establishes specific time periods for decommissioning unused portions of operating facilities and for decommissioning the entire site upon termination of operations; and 3) requires financial assurance to be maintained in place during facility operation and to be updated when the licensee decides to cease operation and begin decommissioning. This rule would help assure that areas with potential contamination are not overlooked and that unused facilities are not left for long periods of time thus minimizing the risk of inadvertent public intrusion and exposure to radiation.

There are approximately 30 licensees affected by this proposed rule. These licensees will receive a copy of the proposed rule with this mailing. All other licensees are being sent this notice for informational purposes only. If you would like a copy of the proposed rule (and one is not enclosed), please call or write our secretary, Anna White, at (360) 753-4481 or P.O. Box 47827, Olympia, WA 98504-7827.

For other questions pertaining to this proposed rule (or to comment) you can reach me at 360-753-3461 or via e-mail at TCF0303@HUB.DOH.WA.GOV or at the same address.

*From 4-April 97 letter
(Mar 97 analysis)*

AMENDATORY SECTION (Amending Order 245, filed 2/21/92, effective 3/23/92)

WAC 246-235-075 Financial assurance and recordkeeping for decommissioning. (1) Each applicant for one of the following licenses shall submit a decommissioning funding plan as described in this section:

(a) A specific license authorizing receipt of radioactive waste for the purpose of volume reduction, repackaging or interim storage.

(b) Receipt of contaminated articles, scrap material, equipment, or clothing to be decontaminated at the licensee's facility.

(c) A specific license authorizing the possession and use of radioactive material of half-life greater than one hundred twenty days and in quantities for unsealed material exceeding 10⁶ times and for sealed forms exceeding 10⁴ times the applicable quantities set forth in WAC 246-221-300 Appendix B (for a combination of isotopes the unity rule applies. A decommissioning funding plan will be required if R is greater than 1, where R is defined as the sum of the ratios of the quantity for sealed and unsealed forms of each isotope compared to the applicable value derived from WAC 246-221-300).

(d) A specific license authorizing possession and use of source material in readily dispersible form and in quantities greater than 10 millicuries.

(2) Each decommissioning funding plan shall contain:

(a) A cost estimate for decommissioning facilities impacted by the activities authorized in the specific license.

(b) A description of the method of assuring funds for decommissioning.

(c) A schedule for adjusting cost estimates and associated funding levels periodically over the life of the facility or facilities.

(d) A description of methods and general procedures for performing facility decontamination, maintaining security, and performing a final radiation survey.

(e) A commitment to clean up accidental spills promptly and to begin decommissioning of the facility or facilities within twelve months of ceasing operation involving radioactive material.

(3) Each cost estimate for decommissioning shall include:

(a) A description of the facility and areas within the facility likely to require decommissioning as a result of routine operation.

(b) Anticipated labor, equipment and material costs.

(c) Anticipated waste volume.

(d) Anticipated packaging, transportation and waste disposal costs.

(e) An assessment of costs associated with an accident involving licensed material.

(4) Financial assurance for decommissioning shall be provided by one or more of the following methods:

(a) Prepayment. Prepayment is the deposit of sufficient funds to pay decommissioning costs. Funds shall be deposited prior to the start of operation into an account segregated from licensee assets and outside the licensee's administrative control. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities.

(b) A surety method, insurance, or other guarantee method. These methods guarantee that decommissioning costs will be paid should the licensee default. A surety method may be in the form of a surety bond, letter of credit, or line of credit. Any surety method or insurance used to provide financial assurance for decommissioning must contain the following conditions:

(i) The surety method or insurance shall be open-ended or, if written for a specified term, such as five years, shall be renewed automatically unless ninety days or more prior to the renewal date, the issuer notifies the department, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance shall also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the department within thirty days after receipt of notification of cancellation.

(ii) The surety method or insurance shall be payable to a trust established for decommissioning costs. The trustee and trust shall be acceptable to the department. Acceptable trustees include an appropriate state or federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(iii) The surety method or insurance must remain in effect until the department has terminated the license.

(c) An external sinking fund in which deposits are made at least annually, coupled with a surety method or insurance, the value of which may decrease by the amount being accumulated in the sinking fund. An external sinking fund is a fund established and maintained by setting aside funds periodically in an account segregated from licensee assets and outside the licensee's administrative control. The total amount of funds in the external sinking fund shall be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities. The surety or insurance provisions shall be as stated in subsection (4)(b) of this section.

(d) In the case of state or local government licensees, a statement of intent containing a cost estimate for decommissioning and indicating that funds for decommissioning will be obtained when necessary.

(e) Other methods of financial assurance as approved by the department. The department may approve other financial mechanisms submitted by the applicant or licensee provided the alternate method meets, at a minimum, the requirements of 10 C.F.R. 30.35 and associated U.S. Nuclear Regulatory Commission guidance.

(5)(a) The department shall review each decommissioning funding plan prior to license issuance and prior to license renewal.

(b) The applicant or licensee shall incorporate department comments into its cost estimate and shall revise its financial surety accordingly.

(c) Applicants shall obtain the appropriate financial assurance as approved by the department prior to receipt of licensed material. The department may issue a new license if the applicant agrees to comply with the decommissioning funding plan as approved. If the applicant defers execution of the financial instrument until after the license has been issued, a signed original of the financial instrument obtained to satisfy the requirements of this section shall be submitted to the department before receipt of licensed material.

(d) Holders of licenses issued on or before the effective date of this rule shall submit a decommissioning funding plan to the department by April 1, 1993. Licensees shall implement the financial assurance requirements within thirty days of receiving department approval of the decommissioning funding plan. Licensees shall submit copies of the financial surety within thirty days of securing the surety and annually thereafter.

(6) Each person licensed under this chapter shall keep records of information important to the safe and effective decommissioning of the facility in an identified location until the license is terminated by the department. If records of relevant information are kept for other purposes, reference to these records and their locations may be used. Information the department considers important to decommissioning consists of:

(a) Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records shall include any known information on identification of involved nuclides, quantities, forms, and concentrations.

(b) As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored, and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations.

(c) Except for areas containing only sealed sources (provided the sources have not leaked or no contamination remains after any leak) or depleted uranium used only for shielding or as penetrators in unused munitions, or radioactive materials having only half-lives of less than sixty-five days, a list contained in a single document and updated every two years, of the following:

(i) All areas designated and formerly designated as restricted areas as defined under WAC 246-220-010;

(ii) All areas outside of restricted areas that require documentation under (a) of this subsection;

(iii) All areas outside of restricted areas where current and previous wastes have been buried as documented under WAC 246-221-230 (8)(a); and

(iv) All areas outside of restricted areas which contain material such that, if the license expired, the licensee would be required to either decontaminate the area to unrestricted release levels or apply for approval for disposal under WAC 246-221-180. Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.

AMENDATORY SECTION (Amending Order 184, filed 7/24/91, effective 8/24/91)

WAC 246-232-060 Termination of licenses and decommissioning of sites and separate buildings or outdoor areas. (1) Each specific licensee shall immediately notify the department in writing when the licensee decides to permanently discontinue all activities involving materials authorized under the license and request termination of the license. This notification and request for termination of the license must include the reports and information specified in subsection (3) (c) and (d) of this section. The licensee is subject to the provisions of subsections (3) and (4) of this section, as applicable.

(2) No less than thirty days before the expiration date specified in a specific license, the licensee shall either:

(a) Submit an application for license renewal under WAC 246-235-050; or

(b) Notify the department in writing if the licensee decides not to renew the license.

(3) If a licensee does not submit an application for license renewal under WAC 246-235-050, the licensee shall on or before the expiration date specified in the license:

(a) Terminate use of ((~~byproduct~~)) radioactive material;

(b) Properly dispose of ((~~byproduct~~)) radioactive material;

(c) Submit a completed departmental form "Certificate of disposition of radioactive material" or equivalent; and

(d) Submit a radiation survey report to confirm the absence of radioactive materials or establish the levels of radioactive contamination, unless the department determines a radiation survey report is not necessary.

(i) If no radioactive contamination attributable to activities conducted under the license is detected, the licensee shall submit a certification that no detectable radioactive contamination was found. If the information submitted under this paragraph and subsection (3) (c) and (d) of this section is adequate, the department will notify the licensee in writing that the license is terminated.

(ii) If detectable levels of radioactive contamination attributable to activities conducted under the license are found, the license continues in effect beyond the expiration date, if necessary, with respect to possession of residual radioactive material present as contamination until the department notifies the licensee in writing that the license is terminated. During this time, the licensee is subject to the provisions of subsection (4) of this section. In addition to the information submitted under subsection (3)(c) and (d) of this section, the licensee shall submit a plan for decontamination, if necessary.

(4) Each licensee who possesses residual ((~~byproduct~~)) radioactive material under subsection (3)(d)(ii) of this section, following the expiration of the facility and/or equipment date specified in the license, shall:

(a) Be limited to actions, involving radioactive material related to decontamination and preparation for release for unrestricted use; and

(b) Continue to control entry to restricted areas until they are suitable for release for unrestricted use and the department notifies the licensee in writing that the license is terminated. The guidance contained in WAC 246-232-140, Schedule D, shall be used in making this determination.

(5) Each general licensee licensed under the provisions of WAC 246-233-020(8), shall immediately notify the department in writing when the licensee decides to discontinue all activities involving radioactive materials authorized under the general license. Such notification shall include a description of how the generally licensed material was disposed and the results of facility surveys, if applicable, to confirm the absence of radioactive materials.

(6) Within sixty days of the occurrence of any of the following, each licensee shall provide notification to the department in writing of such occurrence, and either begin decommissioning its site, or any separate building or outdoor area that contains residual radioactivity so that the building or outdoor area is suitable for release in accordance with department requirements, or submit within twelve months of notification a decommissioning plan, if required by subsection (10)(a) of this section, and begin decommissioning upon approval of that plan if:

(a) The license has expired or has been revoked by the department; or

(b) The licensee has decided to permanently cease principal activities, as defined in this section, at the entire site or in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with department requirements; or

(c) No principal activities under the license have been conducted for a period of twenty-four months; or

(d) No principal activities have been conducted for a period of twenty-four months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with department requirements.

(7) As used in this section, principal activities means activities authorized by the license which are essential to achieving the purpose(s) for which the license was issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

(8) Coincident with the notification required by subsection (6) of this section, the licensee shall maintain in effect all decommissioning financial assurances established by the licensee pursuant to WAC 246-235-075 or as required by this section. The amount of the financial assurance must be increased, or may be decreased, as appropriate, to cover the detailed cost estimate for decommissioning established pursuant to subsection (10)(a) of this section. Following approval of the decommissioning plan, a licensee may reduce the amount of the financial assurance as decommissioning proceeds and radiological contamination is reduced at the site with the approval of the department.

(9) The department may grant a request to extend the time periods established in subsection (6) of this section if the

department determines that this relief is not detrimental to the public health and safety and is otherwise in the public interest. The request must be submitted no later than thirty days before notification pursuant to subsection (6) of this section. The schedule for decommissioning set forth in subsection (6) of this section may not commence until the department has made a determination on the request.

(10) (a) A decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the department and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:

(i) Procedures would involve techniques not applied routinely during cleanup or maintenance operations;

(ii) Workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

(iii) Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(iv) Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(b) The department may approve an alternate schedule for submittal of a decommissioning plan required pursuant to subsection (6) of this section if the department determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public health and safety and is otherwise in the public interest.

(c) Procedures such as those listed in (a) of this subsection with potential health and safety impacts may not be carried out prior to approval of the decommissioning plan.

(d) The proposed decommissioning plan for the site or separate building or outdoor area must include:

(i) A description of the conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan;

(ii) A description of planned decommissioning activities;

(iii) A description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;

(iv) A description of the planned final radiation survey;

(v) An updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning;

(vi) A description of the physical security plan and material control and accounting plan provisions in place during decommissioning;

(vii) For decommissioning plans calling for completion of decommissioning later than twenty-four months after plan approval, the plan shall include a justification for the delay based on the criteria in subsection (12) of this section.

(e) The proposed decommissioning plan will be approved by the department if the information therein demonstrates that the decommissioning will be completed as soon as practicable and that the health and safety of workers and the public will be adequately protected.

(11) (a) Except as provided in subsection (12) of this section, licensees shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than twenty-four months following the initiation of decommissioning.

(b) Except as provided in subsection (12) of this section, when decommissioning involves the entire site, the licensee shall request license termination as soon as practicable but no later than twenty-four months following the initiation of decommissioning.

(12) The department may approve a request for an alternative schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the department determines that the alternative is warranted by consideration of the following:

(a) Whether it is technically feasible to complete decommissioning within the allotted twenty-four-month period;

(b) Whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted twenty-four-month period;

(c) Whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay;

(d) Whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and

(e) Other site-specific factors which the department may consider appropriate on a case-by-case basis, such as the regulatory requirements of other government agencies, lawsuits, ground water treatment activities, monitored natural ground water restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

(13) As the final step in decommissioning, the licensee shall:

(a) Certify the disposition of all licensed material, including accumulated wastes, by submitting a completed certificate of disposition of radioactive material or equivalent information; and

(b) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey unless the licensee demonstrates that the premises are suitable for release in some other manner. The licensee shall, as appropriate:

(i) Report levels of gamma radiation in units of millisieverts (microroentgen) per hour at one meter from surfaces, and report levels of radioactivity, including alpha and beta, in units of megabecquerels (disintegrations per minute or microcuries) per one hundred square centimeters--removable and fixed--for surfaces, megabecquerels (microcuries) per milliliter for water, and becquerels (picocuries) per gram for solids such as soils or concrete; and

(ii) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(14) Specific licenses, including expired licenses, will be terminated by written notice to the licensee when the department determines that:

(a) Radioactive material has been properly disposed;

(b) Reasonable effort has been made to eliminate residual radioactive contamination, if present; and

(c)(i) A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with department requirements; or

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with department requirements.

(15) Specific licenses for uranium and thorium milling are exempt from subsections (6)(d), (9) and (10) of this section with respect to reclamation of tailings impoundments and/or waste disposal areas.

AGREEMENT STATE REGULATIONS REVIEW RECORD

Washington January 1997 Decommissioning Rule Amendment

reviewed March 1997

<u>Div</u>	<u>Definition</u>	<u>CFR Citation</u>	<u>State Citation</u>	<u>Comments</u>
2	Principal activities	30.4	[246-232-060(7)]	:

<u>Division and CFR citation</u>	<u>Rule subject</u>	<u>State citation</u>	<u>Comments</u>
2 30.35	Financial assurance and recordkeeping for decommissioning	[246-235-075]	:amends 075(5)(c); equivalent to 30.35(b)(2) :amends 075(6)(c); equivalent to 30.35(g)(3) and :40.36 (f)(93)
2 30.36 [except(a)(2)]	Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas	[246-232-060]	:amends 060(3) & (4); no equivalent NRC provisions :amends 060(6) thru (14); equiv to 30.36(d) thru (k) :amends 060(15); equivalent to 40.42(l)