

**3701:1-40-17      Financial assurance and record keeping for decommissioning.**

- (A) Prior to the director issuing a radioactive materials license:
  - (1) Each applicant for a specific license or license renewal authorizing the possession and use of unsealed radioactive material of half-life greater than one hundred twenty days and in quantities exceeding ten thousand times the applicable quantities set forth in appendix A to this rule shall submit a decommissioning funding plan as described in paragraph (D) of this rule. The decommissioning funding plan must also be submitted when a combination of radionuclides is involved if  $R$  divided by ten thousand is greater than one, where  $R$  is defined here as the sum of the ratios of the quantity of each radionuclide to the applicable value in appendix A to this rule.
  - (2) Each applicant for a specific license or license renewal authorizing the possession and use of sealed sources or plated foils of half-life greater than one hundred twenty days and in quantities exceeding one trillion times the applicable quantities of appendix A to this rule, shall submit a decommissioning funding plan as described in paragraph (D) of this rule. The decommissioning funding plan must also be submitted when a combination of radionuclides is involved if  $R$  divided by one trillion is greater than one, where  $R$  is defined here as the sum of the ratios of the quantity of each radionuclide to the applicable value in appendix A to this rule.
- (B) Prior to the director issuing a radioactive materials license, each applicant for a specific license or license renewal authorizing possession and use of radioactive material of half-life greater than one hundred twenty days and in quantities specified in paragraph (C) of this rule shall either:
  - (1) Submit a decommissioning funding plan as described in paragraph (D) of this rule; or
  - (2) Submit a certification that financial assurance for decommissioning has been provided in the amount prescribed by paragraph (C) of this rule using one of the methods described in paragraph (E) of this rule. The applicant shall submit to the director, as part of the certification, a signed original of the financial instrument obtained to satisfy the requirements of paragraph (E) of this rule.
- (C) Prior to the director issuing a radioactive materials license, an applicant providing certification of financial assurance for decommissioning as specified in paragraph (B)(2) of this rule shall provide the certification in a monetary amount based upon the quantity of licensed material specified as follows:
  - (1) Greater than one thousand but less than or equal to ten thousand times the applicable quantities of appendix A to this rule in unsealed form. For a combination of radionuclides, if  $R$ , as defined in paragraph (A) of this rule, divided by one thousand is greater than one but  $R$  divided by ten thousand is less than or equal to one, the sum of three hundred thousand dollars.
  - (2) Greater than ten billion but less than one trillion times the applicable quantities of appendix A to this rule in sealed sources or plated foils. For a combination of radionuclides, if  $R$ , as defined in paragraph (A) of this rule, divided by ten billion

is greater than one but R divided by one trillion is less than or equal to one, the sum of one hundred fifty thousand dollars.

(D)

- (1) Each decommissioning funding plan must be submitted for review and approval and must contain:
  - (a) A detailed cost estimate for decommissioning, in an amount reflecting:
    - (i) The cost of an independent contractor to perform all decommissioning activities;
    - (ii) The cost of meeting the criteria specified in paragraph (B) of rule 3701:1-38-22 of the Administrative Code for unrestricted use, provided that, if the applicant or licensee can demonstrate its ability to meet the provisions of paragraph (D) of rule 3701:1-38-22 of the Administrative Code, the cost estimate may be based on meeting this criteria;
    - (iii) The volume of onsite subsurface material containing residual radioactivity that will require remediation to meet the criteria for license termination; and
    - (iv) An adequate contingency factor.
  - (b) Identification of and justification for using the key assumptions contained in the decommissioning cost estimate;
  - (c) A description of the method of assuring funds for decommissioning from paragraph (E) of this rule, including means for adjusting cost estimates and associated funding levels periodically over the life of the facility;
  - (d) A certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning; and
  - (e) A signed original of the financial instrument obtained to satisfy the requirements of paragraph (E) of this rule (unless a previously submitted and accepted financial instrument continues to cover the cost estimate for decommissioning).
- (2) At the time of license renewal and at intervals not to exceed three years, the decommissioning funding plan must be resubmitted with adjustments as necessary to account for the changes in costs and the extent of contamination. If the amount of financial assurance will be adjusted downward, this cannot be done until the updated decommissioning funding plan is approved. The decommissioning funding plan must update the information submitted with the original or prior approved plan, and must specifically consider the effect of the following events on decommissioning costs:
  - (a) Spills of radioactive material producing additional residual radioactivity in onsite subsurface material;
  - (b) Waste inventory increasing above the amount previously estimated;

- (c) Waste disposal costs increasing above the amount previously estimated;
  - (d) Facility modifications;
  - (e) Changes in authorized possession limits;
  - (f) Actual remediation costs that exceed the previous cost estimate;
  - (g) Onsite disposal; and
  - (h) Use of a settling pond.
- (E) Financial assurance for decommissioning, either by a decommissioning funding plan or certification of financial assurance, shall be provided by the licensee and approved by the director prior to the issuance of the license and shall be provided by one or more of the following methods:
- (1) Prepayment by depositing into an account segregated from licensee assets and outside the licensee's administrative control, cash or liquid assets such that the amount of funds will be sufficient to pay decommissioning costs. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities.
  - (2) Surety, insurance, or other method in accordance with paragraph (F) of this rule, that guarantees that decommissioning costs will be paid. A surety method may be in the form of a surety bond, letter of credit, or line of credit. A guarantee by the applicant or licensee may not be used in combination with any other financial methods used to satisfy the requirements of this paragraph or in any situation where the applicant or licensee has a parent company holding majority control of the voting stock of the company.
  - (3) A parent company guarantee of funds for decommissioning costs based on a financial test may be used provided that the parent company meets the requirements specified in appendix B of this rule. A parent company guarantee may not be used in combination with other financial methods to satisfy the requirements of this rule.
  - (4) For commercial corporations that issue bonds, a guarantee of funds by the applicant or licensee for decommissioning costs based on a financial test may be used provided that the guarantee meets the requirements of appendix C to this rule.
  - (5) For commercial companies that do not issue bonds, a guarantee of funds for decommissioning costs may be used provided that the guarantee meets the requirements of appendix D to this rule.
  - (6) For nonprofit colleges, universities, hospitals, or research and development entities, a guarantee of funds for decommissioning costs may be used provided that the guarantee meets the requirements of appendix E to this rule. The director may require proof of nonprofit status.
  - (7) 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 in which the total amount of funds would 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 must be as stated in paragraph (E)(2) of this rule.

- (8) In the case of state or local government licensee, a statement of intent containing a cost estimate for decommissioning or an amount specified in paragraphs (C)(1) to (C)(3) of this rule, and indicating that funds for decommissioning will be obtained when necessary. As used in this rule, "state or local government licensee" does not include government owned or assisted colleges, universities or hospitals.
- (F) Any surety method or insurance used to provide financial assurance for decommissioning shall be in the form of instruments that contain language as provided in appendix F to this rule, and shall contain the following conditions:
- (1) The surety method or insurance must be open-ended or, if written for a specified term, such as five years, must be renewed automatically unless ninety days or more prior to the renewal date, the issuer notifies the director, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance must 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 director within thirty days after receipt of notification of cancellation.
  - (2) The surety method or insurance must be payable to a trust established for decommissioning costs. The trustee and trust must be acceptable to the director. An acceptable trustee includes 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.
  - (3) The surety method or insurance must remain in effect until the director has terminated the license.
  - (4) The surety company issuing the bond must, at a minimum, be among those listed as acceptable in the "Circular 570" of the United States department of the treasury (in effect July 1, 2005).
- (G) A licensee must notify the director by certified mail within ten business days of the commencement of a voluntary or involuntary bankruptcy proceeding under Title 11 of the United States Code (as amended April 20, 2005). A licensee who fulfills the financial assurance requirements by obtaining a trust fund, surety bond, or other acceptable financial assurance will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution issuing the instrument. The licensee shall establish other financial assurance within sixty days after such an event.
- (H) Financial assurance for decommissioning, either by a decommissioning funding plan or certification of financial assurance, that is provided by a contract of insurance

shall not include any arrangement that constitutes self-insurance. As used in this rule:

- (1) "Insurance" means a contract issued or underwritten by an insurance company, insurance service, or insurance organization which is licensed to engage in the business of insurance in Ohio, that binds the insurer to indemnify another against a specified loss in return for premiums paid.
  - (2) "Self insurance" means a contract of insurance issued either by the licensee or by an insurer affiliated with or an affiliate of the licensee.
  - (3) "Affiliate of" or "affiliated with" means that the licensee, either directly or indirectly, through one or more intermediaries or subsidiaries, controls, is controlled by, or is under common control with the insurer.
  - (4) "Control", including "controlled by", and "under common control with" means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, proxy, membership on the board, or otherwise.
- (I) Each person licensed under this chapter, and rule 3701:1-38-02 of the Administrative Code as well as chapters containing rules regarding manufacturing and distribution (Chapter 3701:1-46 of the Administrative Code), industrial radiography (Chapter 3701:1-48 of the Administrative Code), well logging Chapter 3701:1-49 of the Administrative Code), irradiators (Chapter 3701:1-52 of the Administrative Code), and medical use (Chapter 3701:1-58 of the Administrative Code) promulgated pursuant to Chapter 3748. of the Revised Code shall keep records of information important to the decommissioning of a facility in an identified location until the site is released for unrestricted use. Before licensed activities are transferred or assigned in accordance with paragraph (B) of rule 3701:1-40-20 of the Administrative Code, a licensee shall transfer all records described in this paragraph to the new licensee, which will be responsible for maintaining these records until the license is terminated. If records important to the decommissioning of a facility are kept for other purposes, reference to these records and their locations may be used. As used in this rule, "information important to the decommissioning of a facility" includes the following:
- (1) 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 must include any known information on identification of involved radionuclides, quantities, forms, and concentrations.
  - (2) As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used 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.
  - (3) Except in the case of an area that contains only a sealed source, provided the

source has not leaked or no contamination remains after any leak, or in the case of a byproduct or accelerator produced material having only a half-life of less than sixty-five days, a list contained in a single document and updated every two years, of the following:

- (a) All areas designated and formerly designated restricted areas as defined in rule 3701:1-38-01 of the Administrative Code.
  - (b) All areas outside of restricted areas that require documentation under paragraph (I)(1) of this rule.
  - (c) All areas outside of restricted areas where current and previous wastes have been buried as documented under rule 3701:1-38-20 of the Administrative Code; and
  - (d) All areas outside of restricted areas that contain material such that, if the license expired, the licensee would be required to either decontaminate the area to meet the criteria for decommissioning in rule 3701:1-38-22 of the Administrative Code, or apply for approval for disposal under rule 3701:1-38-19 of the Administrative Code.
- (4) 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.

Effective: 11/24/2016

Five Year Review (FYR) Dates: 09/07/2016 and 04/01/2020

CERTIFIED ELECTRONICALLY

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Certification

11/14/2016

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Date

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