Radiation Guide


08/07
Introduction

Section 38.7 of Code Rule 38 specifies requirements for licensees who must provide financial assurance in case it is needed to defray the costs of eventual decommissioning of their facilities.

This guidance is being provided to help you to determine whether you are required to provide such assurance and if so, in what amount. Some licensees must submit a decommissioning funding plan (DFP) with a “customized” amount of financial assurance and any licensee may do if this is preferred over the amount determined through use of this guide.

Applications for licenses may state that the financial instrument will be obtained after the license has been approved but before authorized material is received. The financial instrument must be in force before actual possession and use of radioactive material and the license will be conditioned to require this.

Licensees authorized to possess radioactive materials with half-lives greater than 120 days will fall into the following categories for financial assurance requirements: (NOTE: “R” as used here means the sum of the ratios of the quantity of each isotope authorized in the license to the corresponding quantity in the new Table 4).

Amount Required Authorization

A. None

1. $< 10^3 \text{ times Table 4 amounts (or } R \div 10^3 < 1\text{)}$ of unsealed materials other than source material.

2. $< 10$ millicuries of source material in dispersible form.

3. $< 10^{10} \text{ times Table 4 amounts (or } R \div 10^{10} < 1\text{)}$ of sealed sources or plated foils

B. $75,000

1. $> 10^{10} \text{ times Table 4 amounts (or } R \div 10^{10} > 1\text{)}$ of sealed sources or plated foils

C. $150,000

1. $> 10^3 \text{ times Table 4 amounts and equal to or less than } 10^4 \text{ times Table 4 amounts (or } R \div > 1 \text{ and } R \div 10^4 \leq 1\text{)}$ of unsealed materials other than source material

2. $> 10$ millicuries of dispersible source material and equal to or less than 100 millicuries

D. $750,000

1. $> 10^4 \text{ times Table 4 amounts and equal to or less than } 10^5 \text{ times Table 4 amounts (or } R \div 10^4 \geq 1 \text{ and } R \div 10^5 \leq 1\text{)}$ of unsealed materials other than source material
E. A Decommissioning Funding Plan is required for licensees who are authorized for more than 100 millicuries of dispersible source material, or more than $10^5$ times Table 4 amounts (or $R \div 10^5 > 1$) of unsealed materials other than source material.

**Financial Assurance Mechanisms**

Financial assurance may be submitted using one or more of the following mechanisms:

- Prepayment
- Surety/Other Guarantee/Insurance
- External Sinking fund combined with Surety or Insurance
- Statement of Intent (Federal, State or Local government licensees only)

Section 38.7 describes all of the above mechanisms. However, since most licensees are expected to submit surety in the form of a letter of credit, this guide will be specific to that mechanism.

**Letters of Credit**

A standby letter of credit that is acceptable as evidence of financial responsibility is a binding arrangement by which the issuing party, such as a bank agrees on behalf of the applicant or licensee (the account party) to place funds in a standby trust or to pay the state authority in the event of any default by the licensee in the performance of decommissioning. The standby letter of credit specifies the document(s) necessary to establish the fact of the licensee’s failure to decommission as required, and the issuer must pay the beneficiary upon presentation of the document(s). The issuer extends this credit in exchange for a fee paid by the applicant or licensee. The arrangement also requires that the applicant or licensee repay, with interest, any funds drawn through the letter of credit.

The issuer should be an institution with the authority to issue a letter of credit and whose operations are regulated and examined by a Federal or State agency. This includes all domestic commercial banks and savings banks, chartered U.S. branches of foreign banks operating in the United States, credit unions and some savings and loan associations.

Under the letter of credit, the Department of Health will direct that funds be placed in the standby trust to pay the costs of decommissioning if the licensee fails to decommission as required. Terms of the letter of credit must specify that funds withdrawn will be placed by the issuer directly into a standby trust fund upon presentation of a draft or other document(s) specified in the letter of credit. Both the letter of credit and the trust agreement should be submitted as evidence of financial assurance. Appendix A to this guide contains checklists and model documents to assist you in preparing and submitting a letter of credit.

If you would prefer to submit one of the other mechanisms described in section 38.7 of Code Rule 38 please contact this office.
Decommissioning Funding Plans

Section 38.7 contains general requirements for decommissioning funding plans but does not specify the components for which cost estimates should be developed.

These would include:
- planning and preparation of the facility and site for decommissioning
- decontamination and dismantling of radioactive facility components.
- packaging, shipment and disposal of radioactive wastes; and
- final radiation surveys

It is expected that licensees with authorized possession limits large enough to require funding plans will obtain the assistance of consultants experienced in planning and conducting decommissioning activities in preparing such plans.

At a minimum the plan should fully but concisely describe the following:

1) The probable extent of contamination throughout the facility and/or site;
2) The cost of removal of contamination to a level conforming with regulations of this Department and of the NYSDEC (for disposal). However, ALARA considerations must be applied to the extent practicable;
3) A description of the contaminating events associated with the licensee’s methods or modes of operation;
4) An inventory of the contaminating materials including:
   a. the quantities
   b. half-lives and
   c. chemical and physical forms of the radioactive materials
5) A description of the radiation hazards and toxicities of the radioactive materials;
6) The extent and location of actual or possible off-site contamination caused by operation of the facility or site;
7) The means of removal and disposal of contaminated materials and radioactive sources which are or would be generated, stored, processed, or otherwise present at the licensed facility or site; and
8) The means for reclaiming the property on which the facility or site is located, and all other properties contaminated by radioactive material authorized under the license.

The Cost Estimate

The cost estimate provides the logic and support for the financial surety amount. As with the funding plan, methods and solutions different from those presented in this guidance document will be acceptable for the cost estimate if they provide a basis for DOH to make necessary determinations associated with
approving the cost estimate for financial surety.

Cost estimates should give the year upon which they are based, be site specific, and be based on the assumption that independent contractors perform all decontamination, reclamation, storage, and disposal including engineering services, chemical tests, and radiological surveys or analyses, as applicable. The units designating dimensions and/or volume should be consistent throughout the cost estimate; either meters or feet, but not both. Increases in costs due to inflation should be addressed for those activities which take several years to complete. Cost estimates should not include any possible resale value for used equipment, facilities, or other similar items or services. The costs should be itemized [See Appendix B - Cost Estimating Tables to provide the logic and support for the cost estimate. A sample format for the cost estimate submittal is provided in this guidance document, as are factors to be considered in estimating reclamation costs and data to be submitted in support of the reclamation plan and cost estimate. These lists are not intended to be all inclusive but to provide a basis from which the applicant/licensee can provide site-specific and complete cost estimates.

DOH acknowledges that some licensees (e.g. pool irradiators) may not require extensive reclamation plans and cost estimates to substantiate their proposed financial surety amounts. However, data submitted should be supported by verifiable cost estimates and supported by logic based on the description of actual operations and actual or potential contamination conditions.

Assumptions utilized in the preparation of the cost estimate should be justified and submitted as part of the cost estimate.
APPENDIX A - EXHIBIT 1

CHECKLIST FOR DECOMMISSIONING FINANCIAL ASSURANCE

NAME OF LICENSEE
OR APPLICANT

MAILING ADDRESS

Check appropriate item in each category (if applicable) and submit with this form

1. _______ Date of Financial Assurance Submission

2. _______ Public Entity
   ______ Private Entity

3. _______ Certification of Financial Assurance Decommissioning Funding Plan

4. (a) _______ Prepayment Option
   ______ Trust Fund
   ______ Escrow Account
   ______ Certificate of Deposit
   ______ Government Fund
   ______ Deposit of Government Securities

   (b) _______ Surety/Insurance/Other Guarantee
   ______ Surety bond
   ______ Letter of Credit
   ______ Line of Credit
   ______ Parent Company Guarantee/Financial Test*

   (c) _______ External Sinking Fund, Sinking Account and Surety! Insurance
   ______ Trust Fund
   ______ Escrow Account
   ______ Certificate of Deposit
   ______ Government Fund
   ______ Deposit of Government Securities
   ______ Surety Bond
   ______ Letter of Credit
   ______ Line of Credit

   (d) _______ Statement of Intent (public entities only)

*May not be used in combination with any other instrument:
APPENDIX A - EXHIBIT 2

CHECKLIST FOR SUBMISSION OF SURETY/INSURANCE/PARENT COMPANY GUARANTEE

A. Check Appropriate Form of Surety/Insurance/Guarantee
   _____ Surety Bond
   _____ Letter of Credit
   _____ Line of Credit
   _____ Parent Company Guarantee/Financial Test*
   _____ Insurance

B. Check Documents Submitted for Surety/Insurance/Guarantee

1. Surety Bond
   _____ Surety Bond
   _____ Standby Trust Agreement
   _____ Acknowledgement

2. Letter of Credit
   _____ Letter of Credit
   _____ Standby Trust Agreement
   _____ Acknowledgement

3. Line of Credit
   _____ Verification
   _____ Standby Trust Agreement
   _____ Acknowledgement

4. Parent Company Guarantee
   _____ Letter from Chief Executive Officer of Applicant or Licensee
   _____ Letter from Chief Financial Officer of Parent Company
   _____ Financial Test: Alternative [I or II]
   _____ Auditor’s Special Report and Attached Schedule
   _____ Corporate Guarantee
   _____ Standby Trust Agreement
   _____ Acknowledgement

5. Insurance
   _____ Certificate of Insurance
   _____ Standby Trust Agreement
   _____ Acknowledgement

*May not be used in combination with any other instrument.
APPENDIX A - EXHIBIT 3

CHECKLIST OF CRITERIA FOR REVIEW OF LETTERS OF CREDIT

- Copy of corporate by-laws or other evidence indicating that parties signing the financial instrument (for the applicant) are authorized to represent the organization in the transaction.

- Evidence that the financial instrument is an originally signed duplicate (e.g., an executed copy of the instrument).

- Evidence that the financial institution is regulated by Federal or State agency (e.g., member of FDIC, Federal Reserve System, etc.).

- The instrument must be entitled a letter of credit.

- The letter should be limited in amount.

- The letter of credit must contain a specified expiration date or be written for a definite term.

- The issuer’s obligation to pay the beneficiary should arise only upon presentation of a draft or other documents specified in the letter of credit.

- The bank must not be called upon to determine a question of fact or law at issue between the licensee and the NYS Department of Health.

- The licensee should have an unqualified obligation to reimburse the issuer for payments made under the letter of credit.
APPENDIX A - EXHIBIT 4

RECOMMENDED WORDING FOR IRREVOCABLE STANDBY LETTER OF CREDIT

IRREVOCABLE STANDBY LETTER OF CREDIT NO. [INSERT NO.]

This Credit Expires [insert date]

Issued To:

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No.___________ in your favor, at the request and for the account of [applicant’s name and address] up to the aggregate amount of [in words], U.S. dollars $_____ available upon presentation of:

(1) your sight draft, bearing reference to this Letter of Credit No._____, and;

(2) your signed statement reading as follows: “I certify that the amount of the draft is payable pursuant to regulations issued under authority of _________________________”

This letter of credit is issued in accordance with regulations issued under the authority of the NYS Department of Health. The Department has promulgated regulations in 12 NYCRR Part 38 which require that a holder of, or applicant for, a license issued under Part 38 provide assurance that funds will be available when needed for decommissioning.

This letter of credit is effective as of [date] and shall expire on [date at least 1 year later], but such expiration date shall be automatically extended for a period of [at least 1 year] on [date] and on each successive expiration date, unless, at least 90 days before the current expiration date, we notify both you and [licensee’s name], by certified mail, as shown on the signed return receipts. If [licensee’s name] is unable to secure alternative financial assurance to replace this letter of credit within 30 days of notification of cancellation the NYS Department of Health may draw upon the full value of this letter of credit prior to cancellation. The bank shall give immediate notice to the applicant and the NYS Department of Health- of any notice received or action filed alleging (1) the insolvency or bankruptcy of the financial institution or (2) any violations of regulatory requirements that could result in suspension or revocation of the bank’s charter or license to do business. The financial institution also shall give immediate notice if the bank, for any reason, becomes unable to fulfill its obligation under the letter of credit.

Whenever this letter of credit is drawn on under and in compliance with the terms of this letter of credit, we shall duly honor such draft upon its presentation to us within 30 days, and we shall deposit the amount of the draft directly into the standby trust fund of [licensee’s name] in accordance with your instructions.
Each draft must bear on its face the clause: “Drawn under Letter of Credit No. _______, dated ______________, and the total of this draft and all other drafts previously drawn under this letter of credit does not exceed [fill in amount].”

[Signature(s) and title(s) of official(s) of issuing institution] [Date]

This credit is subject to [insert “the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce,” or “the Uniform Commercial Code”].
APPENDIX A - EXHIBIT 5

STANDBY TRUST AGREEMENT

TRUST AGREEMENT, the Agreement entered into as of [date] by and between [name of DOH Licensee] a [name of State] [insert “corporation,” “partnership,” “association,” or “proprietorship”], herein referred to as the “Grantor,” and [name and address of a national bank or other Trustee acceptable to the NYS Department of Health], the “Trustee.”

WHEREAS, the New York State Department of Health has promulgated regulations in 12 NYCRR Part 38. These regulations, applicable to the Grantor, require that a holder of, or an applicant for, a license provide assurance that funds will be available when needed for required decommissioning activities.

WHEREAS, the Grantor has elected to use a [insert “letter of credit,” “line of credit,” “surety bond,” “insurance policy,” “parent guarantee,” “certificate of deposit,” or “deposit of government securities”] to provide [insert “all” or “part”] of such financial assurance for the facilities identified herein; and

WHEREAS, when payment is made under a [insert “letter of credit,” “line of credit,” “surety bond,” “insurance policy, “certificate(s) of deposit,” “deposit of government securities,” or “parent guarantee”), this standby trust shall be used for the receipt of such payment; and

WHEREAS, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee,

NOW, THEREFORE, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term “Grantor” means the NYS Department of Health licensee who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term “Trustee” means the trustee who enters into this Agreement and any successor Trustee

Section 2. Costs of Decommissioning. This Agreement pertains to the costs of decommissioning the materials and activities identified in License Number [insert the license number] issued pursuant to 12 NYCRR Part 38.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a standby trust fund (the Fund) for the benefit of the DOH. The Grantor and the Trustee intend that no third party have access to the Fund except as provided herein.

Section 4. Payments Constituting the Fund. Payments made to the Trustee for the Fund shall consist of cash, securities, or other liquid assets acceptable the Trustee. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee are referred to as the “Fund,” together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount of, or adequacy of the
Fund, nor any duty to collect from the Grantor, any payments necessary to
discharge any liabilities of the Grantor established by the NYSDOH.

Section 5. Payment for Required Activities Specified in the Plan. The Trustee shall make
payments from the Fund to the Grantor upon presentation to the Trustee of the
following:

a. A certificate duly executed by the Secretary of the Depositor attesting to the
occurrence of the events, and in the form set forth in the attached Specimen
Certificate, and

b. A certificate attesting to the following conditions;
   1. that decommissioning is proceeding pursuant to a- DOH-approved plan.

   2. that the funds withdrawn will be expended for activities undertaken
      pursuant to that Plan, and

   3. that the DOH has been given 30 days prior notice of [insert name of
      licensee’s] intent to withdraw funds from the escrow fund.

No withdrawal from the fund can exceed ______ percent of the outstanding balance
of the Fund or _______________ dollars, whichever is greater, unless NYSDOH
approval is attached.

In the event of the Grantor’s default or inability to direct decommissioning
activities, the Trustee shall make payments from the Fund as the DOH shall direct,
in writing, to provide for the payment of the costs of required activities covered by
this Agreement. The Trustee shall reimburse the Grantor or other persons as
specified by the NYSDOH from the Fund for expenditures for required activities
in such amounts as the NYSDOH shall direct in writing. In addition, the Trustee
shall refund to the Grantor such amounts as the DOH specifies in writing. Upon
refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 6. Trust Management. The Trustee shall invest and reinvest the principal and income
of the Fund and keep the Fund invested as a single fund, without distinction
between principal and income, in accordance with general investment policies and
guidelines which The Grantor may communicate in writing to the Trustee from
time to time, subject, however, to the provisions of this section. In investing,
reinvesting, exchanging, selling, and managing the Fund, the Trustee shall
discharge its duties with respect to the Fund solely in the interest of the beneficiary
and with the care, skill, prudence, and diligence under the circumstances then
prevailing which persons of prudence, acting in a like capacity and familiar with
such matters, would use in the conduct of an enterprise of a like character and with
like aims; except that:

(a) Securities or other obligations of the Grantor, or any other owner or
operator of the facilities, or any of their affiliates as defined in the
Investment Company Act of 1940, as amended (15 U.S.C. 80a—2(a)), shall
not be acquired or held, unless they are securities or other obligations of the
Federal or a State government;

(b) The Trustee is authorized to invest the Fund in time or demand deposits of
the Trustee, to the extent insured by an agency of the Federal Government,
and in obligations of the Federal Government such as GNMA, FNMA, and
FHLM bonds and certificates or State and Municipal bonds rated BBB or
higher by Standard and Poors or Baa or higher by Moody’s Investment
Services; and

(c) For a reasonable time, not to exceed 60 days, the Trustee is authorized to hold un-invested cash, awaiting investment or distribution, without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940 (15 U.S.C. 80a-1 et seq.), including one that may be created, managed, underwritten or to which investment advice is rendered, or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale, as necessary to allow duly authorized withdrawals at the joint request of the Grantor and the DOH or to reinvest in securities at the direction of the Grantor;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name, or in the name of a nominee, arid to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, to reinvest interest payments and funds from matured and redeemed instruments, to file proper forms concerning securities held in the Fund in a timely fashion with appropriate government agencies, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so, deposited, such securities may be merged and held in bulk in the name of the nominee or such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the U.S. Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.
Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. After payment has been made into this standby trust fund, the Trustee shall annually, at least 30 days before the anniversary date of receipt of payment into the standby trust fund, furnish to the Grantor and to the DOH; a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days before the anniversary date of the establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the NYSDOH shall constitute a conclusively binding assent by the Grantor, barring the grantor from asserting any claim or liability against the Trustee with respect to the matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel with respect to any question arising as to the construction of this agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting on the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing with the Grantor (See Schedule C.)

Section 13. Successor Trustee. Upon 90 days notice to the NYSDOH the Trustee may resign; upon 90 days notice to the NYSDOH and the Trustee, the Grantor may replace the Trustee; but such resignation or replacement shall not be effective until the Grantor has appointed a successor Trustee and this successor accepts the appointment. The successor Trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor Trustee’s acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor Trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor Trustee or for instructions. The successor Trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the NYSDOH and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are signatories to this agreement or such other designees as the Grantor may designate in writing. The Trustee shall be fully protected in acting without inquiry in accordance with the grantor’s orders, requests, and instructions. If the NYSDOH issues orders, requests, or instructions to the Trustee these shall be in writing, signed by the NYSDOH or its designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the NYSDOH hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instruction from the
Grantor and/or the NYSDOH except as provided for herein.

Section 15. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee and the NYSDOH, or by the Trustee and the NYSDOH if the Grantor ceases to exist.

Section 16. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 15, this trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the NYSDOH, or by the Trustee and the NYSDOH if the Grantor ceases to exist. Upon termination of the trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor or its successor.

Section 17. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this trust, or in carrying out any directions by the Grantor or the NYSDOH issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the trust fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 18. This Agreement shall be administered, construed, and enforced according to the laws of the State of New York.

Section 19. Interpretation and Severability. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement. If any part of this agreement is invalid, it shall not affect the remaining provisions which will remain valid and enforceable.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed by the respective officers duly authorized and the incorporate seals to be hereunto affixed and attested as of the date first written above.

ATTEST:  
[Insert name of licensee (Grantor)]  
[Signature of. Representative of Grantor]  
[Title]

[Title]  
[Seal]

ATTEST:  
[Insert name of Trustee]  
[Signature of representative of Trustee]  
[Title]

ATTEST:  
[Title]  
[Seal]
Specimen Certificate of Events

[Insert name and address of trustee]

Attention: Trust Division

Gentlemen:

In accordance with the terms of the Agreement with you dated ________________, I, ________________________, Secretary of [insert name of licensee] hereby certify that the following events have occurred:

1. [Insert name of licensee] is required to commence the decommissioning of its facility located at [insert location of facility) (hereinafter called the decommissioning).

2. The plans and procedures for the commencement and conduct of the decommissioning have been approved by the NYSDOH or its successor on ________________ (copy of approval attached).

3. The Board of Directors of [insert name of licensee] has adopted the attached resolution authorizing the commencement of the decommissioning.

______________________________
Secretary of [insert name of licensee]

________________________________
Date
Certificate of Resolution

I, ______________________, do hereby certify that I am Secretary of [insert name of licensee], a [insert state of incorporation] corporation, and that the resolution listed below was duly adopted at a meeting of this Corporation’s Board of Directors on [insert date]

IN WITNESS WHEREOF, I have hereunto signed my name and affixed the seal of this Corporation this____ day of ______________, _____

________________________
Secretary

RESOLVED, that this Board of Directors hereby authorizes the President, or such other employee of the Company as he may designate, to commence decommissioning activities at [insert name of facility] in accordance with the terms and conditions described to this Board of Directors at this meeting and with such other terms and conditions as the President shall approve with and upon the advice of Counsel.
TRUST AGREEMENT SCHEDULE

SAMPLE SCHEDULE A

This Agreement demonstrates financial assurance for the following cost estimates for the following licensed activities:

<table>
<thead>
<tr>
<th>NYSDOH License Number</th>
<th>Name and Address of Licensee</th>
<th>Address of Licensed Activity</th>
<th>Cost estimate For Regulatory Assurance Demonstrated by This Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The cost estimates listed here were last adjusted and approved by the DOH on [date].

SAMPLE SCHEDULE B

<table>
<thead>
<tr>
<th>AMOUNT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AS EVIDENCED BY</td>
<td></td>
</tr>
</tbody>
</table>

SAMPLE SCHEDULE C

[Insert name, address and phone number of Trustee]

Trustee’s fees shall be $___________ per year
Sample of Acknowledgement

The following is an example of the acknowledgement that must accompany the trust agreement for a standby trust fund or trust fund.

ACKNOWLEDGEMENT

STATE OF ______________________________________

To Wit: ________________________________________

CITY OF ________________________________________

On this ___________ day of _____________ , before me, a notary public in and for the city and State aforesaid, personally appeared ___________________, and she/he did depose and say that she/he is the [title], of [_______ if applicable, insert “, national banking association”, or “, State banking association”], Trustee, which executed the above instrument, that she/he knows the seal of said association; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the association; and that she/he signed her/his name thereto by like order.

___________________________
[Signature of notary public]

My Commission Expires: ________________

[Date]
### APPENDIX B

**COST ESTIMATING TABLES**

1. Planning and Preparation

| Table 1 |
|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| **Task** | **Supervisor** | **Foreman** | **H.P.** | **Clerical** | **Total** | **Total Cost** |
| 1 | Preparation of Documentation on for Regulatory Agencies | | | | | |
| 2 | Submittal of Decommissioning Plan to DOH when required under 12 NYCRR Part 38 | | | | | |
| 3 | Development of Work Plans | | | | | |
| 4 | Procuring of Special Equipment | | | | | |
| 5 | Staff Training | | | | | |
| 6 | Characterization of Radiological Condition of the Facility (Including soil and tailings analysis or groundwater analysis, if applicable) | | | | | |
| 7 | Other | | | | | |
| 8 | Total | | | | | |
## COST ESTIMATING TABLES

### Table 2

<table>
<thead>
<tr>
<th>Position</th>
<th>Basic Salaries ($/yr)</th>
<th>Overhead Rate (%)</th>
<th>Worker Cost/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreman</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Craftsman</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Physicist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laborer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2. Decontamination and/or Dismantling of Radioactive Facility Components

<table>
<thead>
<tr>
<th>No.</th>
<th>Dimensions (m$^3$)</th>
<th>Amount of Floor Space</th>
<th>No.</th>
<th>Dimensions (m$^3$)</th>
<th>Amount of Wall Space</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glove Boxes</td>
<td></td>
<td></td>
<td>Fume Hood</td>
<td>(m$^3$)</td>
<td>Ventilation Ductwork</td>
<td>(m$^3$)</td>
</tr>
<tr>
<td>Hot Cells</td>
<td>(m$^3$)</td>
<td></td>
<td>Lab Benches</td>
<td>(m$^3$)</td>
<td>Amount of Wall Space</td>
<td>(m$^3$)</td>
</tr>
<tr>
<td>Sink and Drain</td>
<td>(m$^3$)</td>
<td></td>
<td></td>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
## Table 3

<table>
<thead>
<tr>
<th>Task</th>
<th>Work Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Decon/Dismantle Major Components and/or Processing and Storage Tanks</td>
<td></td>
</tr>
<tr>
<td>2. Decon/Dismantle Laboratories, Fume Hoods, Glove Boxes, Benches, etc.</td>
<td></td>
</tr>
<tr>
<td>3. Decon/Dismantle Waste Areas</td>
<td></td>
</tr>
<tr>
<td>4. Decon/Dismantle Service Facilities</td>
<td></td>
</tr>
<tr>
<td>5. Decon/Dismantle Waste Treatment Facilities and Storage Areas on the Site (Including exhume and package contaminated soil and tailings, if any)</td>
<td></td>
</tr>
<tr>
<td>6. Monitor for compliance, reclean and remonitor, if necessary</td>
<td></td>
</tr>
<tr>
<td>7. Other (e.g., contractor fees)</td>
<td></td>
</tr>
</tbody>
</table>

* Indicates whether component is to be decontaminated to unrestricted release levels or packaged and disposed of at a low—level waste site.
### Table 4
<table>
<thead>
<tr>
<th>Equipment/Supply</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### 3. Packaging, Shipping, and Disposal of Radioactive Wastes

### Table 5
<table>
<thead>
<tr>
<th>Waste Type</th>
<th>Volume (m³)</th>
<th>No. of Containers</th>
<th>Type of Containers</th>
<th>Units Cost of Container</th>
<th>Cost of Container</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Total</td>
<td></td>
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</tr>
</tbody>
</table>

### Table 6
**Distance Shipped**  
- (miles)  
**Unit cost for shipment**  
- ($/miles/truckload)  
**Additional charges**  
- **Overweight**  
- ($/mile)  
- **Surcharges**  
- ($/mile)  

<table>
<thead>
<tr>
<th>Waste Type</th>
<th>No. of Shipments</th>
<th>Unit Cost for Shipping</th>
<th>Distance Shipped</th>
<th>Surcharge</th>
<th>Transportation Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Total</td>
<td></td>
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</tr>
</tbody>
</table>

### Table 7
**Burial Charges**  
- ($/m³)  
**Surcharges**  
- **Per container**  
- ($)  
- **Disposal**  
- ($/m³)  

<table>
<thead>
<tr>
<th>Waste Type</th>
<th>Burial Volume</th>
<th>Unit Cost of Burial</th>
<th>Surcharge</th>
<th>Burial Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Total</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>
COST ESTIMATING TABLES

4. Restoration of Contaminated Areas on Facility Ground

Table 8

<table>
<thead>
<tr>
<th>Work Days</th>
<th>Task</th>
<th>Supervisor</th>
<th>Foreman</th>
<th>H.P.</th>
<th>Clerical</th>
<th>Total</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Backfill and Restore</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
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</tr>
</tbody>
</table>

5. Final Radiation Survey

Table 9

<table>
<thead>
<tr>
<th>Work Days</th>
<th>Task</th>
<th>Supervisor</th>
<th>Foreman</th>
<th>H.P.</th>
<th>Clerical</th>
<th>Total</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<tr>
<td>3</td>
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</tbody>
</table>

6. Site Stabilization, Long-Term Surveillance (if applicable)

Table 10

<table>
<thead>
<tr>
<th>Work Days</th>
<th>Task</th>
<th>Supervisor</th>
<th>Foreman</th>
<th>H.P.</th>
<th>Clerical</th>
<th>Total</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<tr>
<td>3</td>
<td></td>
<td></td>
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</tbody>
</table>
WORKSHEET FOR DETERMINING
FINANCIAL ASSURANCE FOR DECOMMISSIONING

Utility Name: ______________________________________________________________

<table>
<thead>
<tr>
<th>Nuclide (half-life &gt;120 days)</th>
<th>( P_i ) Possession Limit (curies)</th>
<th>( Q_i ) Table 4 Quantity (curies)</th>
<th>Unsealed Sources ( R_i = \frac{P_i}{Q_i} )</th>
<th>Sealed Sources ( R_i = \frac{P_i}{Q_i} )</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

\( R = \sum R_i \)
\( R = \sum R_i \)

(Use additional sheets as necessary.)

**Unsealed Sources:**

1. Is \( R/100,000 > 1 \)? ________ If “YES” submit DFP. If “NO” go to 2.
2. Is \( R/10,000 > 1 \)? ________ If “YES” the amount of Financial Assurance = $750,000. If “NO” go to 3.
3. Is \( R/1000 > 1 \)? ________. If “YES” the amount of Financial Assurance = $150,000. If “NO”, no Financial Assurance required.

**Sealed Sources:**

Is \( R/1E10 > 1 \)? ________________ If “YES” the amount of Financial Assurance = $75,000. If “NO”, no Financial Assurance is required.

**Amount of Financial Assurance Required**

__________ _____________________________________

Date: ___________________ Reviewer: ___________________