

**RADIATION PROTECTION PROGRAM
3-YEAR REGULATORY FEE AND PROGRAM COST ANALYSIS REPORT
TO THE ENVIRONMENTAL QUALITY BOARD**

Revisions to the fee regulations governing radiation-producing machines, radioactive material, and radon at 25 Pa. Code Chapters 215 through 240 became effective on September 12, 2009. These revisions included increases to several fee categories. See Attachment 1 for the current fees. This report contains an overall analysis of the Radiation Protection Program (RPP) fees included within Article V covering Radiological Health. The RPP includes the functions of both the Department of Environmental Protection (department) Central Office Bureau of Radiation Protection and the Regional Offices. Any fee update will result in revisions to the regulations at 25 Pa. Code Chapters 218 (Fees) and 240 Appendix A (Radon Certification Fees) and will undergo a full review by the department's Radiation Protection Advisory Committee (RPAC).

The program areas are grouped into four categories: Radiation-producing machines (i.e., Accelerator, X-ray, and Vendors); Radioactive Materials and Decommissioning; Radon; and nuclear power plant oversight. The cost analysis for this report will be presented for the first three categories. The nuclear power plant oversight functions of the RPP are performed by the Nuclear Safety Division and Environmental Surveillance Section, which are funded through a separate statutory mechanism. These program areas and their functions are funded under Act 147 of 1984 (amended by Act 31 of 2007) and are subject to a separate fee analysis required by the Act. This analysis can be found in the publication *Radiation Protection Act 31 of 2007 Report to General Assembly* (2900-BK-DEP4445), <http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-100580/2900-BK-DEP4445.pdf>.

The RPP was reauthorized under Act 147 of 1984, the purpose of which is to “establish and maintain a comprehensive program of radiation protection in the Department of Environmental Resources.” For this broad purpose, the department has the power to “collect fees necessary to fund any and all other acts not inconsistent with any provision of this act which it may deem necessary or proper for the effective enforcement of this act.” Act 147 also directed the department to enter into agreement with the federal government for the regulation of radioactive material. Authority to collect fees related to the Radon program is in the Radon Certification Act (Act 43 of 1987).

The following is a summary of the RPP fee collections and program costs by functional area for the past three fiscal years and the next three projected years.

Accelerator, X-ray, and Vendors

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Fee Collection*	\$4,426	\$4,383	\$4,750	\$4,590	\$4,590	\$4,590
Program Costs*	\$3,188	\$3,332	\$3,426	\$4,061	\$4,156	\$4,280

*In thousands of dollars; assumes current fee rates; includes fines and penalties.

BACKGROUND:

The RPP's Radiation-Producing Machines Program regulates X-ray machine users and service providers and accelerators. This includes:

- ❖ X-ray Registration (Central Office)
 - Registering and maintaining an inventory of X-ray equipment that produces ionizing radiation.
 - Developing regulations for the safe use of radiation-producing machines as the need arises.
 - Providing the public with information regarding the use of ionizing radiation in the commonwealth.
 - Conducting studies to evaluate ionizing radiation hazards and their control.
 - Developing guidance and fact sheets to assist registrants in complying with the radiation regulations and avoiding unnecessary exposure to radiation.
- ❖ X-ray Inspection (Regional Offices)
 - Inspecting users of ionizing radiation-producing machines to monitor compliance with state radiation regulations.
- ❖ Mammography Quality Standards Act Activities (Central and Regional Offices)
 - Administering the Bureau's federal contract for the Mammography Quality Standards Act (MQSA), which involves performing an annual survey of mammography facilities.
- ❖ Accelerator Licensing (Central Office)
 - Issuing specific licenses to accelerator facilities.
- ❖ Accelerator Inspection (Regional Offices)
 - Inspecting users of accelerators to monitor compliance with state radiation regulations.
- ❖ Vendor Registration (Central Office)
 - Registering radiation-producing machine vendors and service providers.
- ❖ Vendor Inspection (Regional Offices)
 - Inspecting radiation-producing machine vendors and service providers.

TREND ANALYSIS:

Revenue in this program area has shown a slight increasing trend in recent years. X-ray test equipment and annual calibration costs vary from year to year and can run in the tens to hundreds of thousands of dollars.

RECOMMENDATION AND COMMENT:

The RPP has conducted a fiscal analysis of this program area. No fee increase is recommended for this reporting period.

Radioactive Materials & Decommissioning

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Fee Collection*	\$3,990	\$3,431	\$3,736	\$3,485	\$3,485	\$3,485
Program Costs*	\$3,645	\$3,819	\$3,931	\$4,693	\$4,807	\$4,951

*In thousands of dollars; assumes current fee rates; includes fines and penalties.

BACKGROUND:

The RPP's Radioactive Materials and Decommissioning Sections are responsible for regulation of radioactive (by-product) material. This includes:

- ❖ Radioactive Material Licensing (Central Office)
 - Issuing and amending radioactive material licenses.
 - Tracking nuclear material events.
 - Public outreach and education on the uses of radioactive material.
 - Maintaining regulations for the safe use of radioactive material as the need arises.
- ❖ Radioactive Material Inspection (Regional Offices)
 - Routine inspection of licensed facilities.
 - Responding to incidents and accidents involving radioactive material.
 - Assisting landfills and metal recyclers with disposal or transfer of orphan radioactive material.
- ❖ Decommissioning (Central and Regional Offices)
 - Performing technical and onsite reviews of decontamination and decommissioning (D&D) activities for radioactive materials license terminations in accordance with appropriate state and federal criteria.
 - Collecting environmental samples and measuring radiation/radioactivity levels on decommissioning projects during investigation and release surveys.

- o Participating and assisting in inspections of any active NRC, EPA, and Army Corps of Engineers radiological site cleanups in Pennsylvania.

TREND ANALYSIS:

Fee collections have been trending down since the national economic recession of 2008. Universities and industries that use radioactive material have been consolidating or finding other operational methods that do not require a license, and many licensees have opted for the small business fee classification.

Actual RPP personnel costs (salaries and benefits) have increased 45% over the previous five years while fees have remained fixed. This analysis factors a three percent increase in all costs annually for future years.

Work in the Decommissioning program is driven by industry trends, federal funding, and ongoing discovery of contaminated sites. Most, but not all, work performed by the Decommissioning program is subject to full cost recovery from a specific site owner. Costs of decommissioning activities at sites where no responsible party exists are paid from the radioactive materials portion of the Radiation Protection Fund.

RECOMMENDATION AND COMMENT:

The RPP has conducted a fiscal analysis of this program area. This analysis indicates a need for fee increases in the Radioactive Materials and Decommissioning areas effective in fiscal year 2015-2016 to remain solvent through 2020-2021. The RPP has initiated the Department’s process for a fee increase and plans to formally present a regulatory revision request to the RPAC and EQB in the fourth quarter of calendar year 2014.

Radon

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Fee Collection & EPA State Indoor Radon Grant (SIRG) Dollars*	\$676	\$672	\$664	\$682	\$682	\$682
Program Costs*	\$1,105	\$1,111	\$1,159	\$1,177	\$1,190	\$1,226

*In thousands of dollars; assumes current fee rates; includes fines and penalties.

BACKGROUND:

Pennsylvania has some of the highest indoor air radon levels in the country. According to the EPA, radon is the second leading cause of lung cancer. The department's Radon Program is one of the most robust in the nation and provides a variety of regulatory and public service activities. These activities include:

- Implementing the SIRG (e.g., education and outreach through public service announcements, and free test kits to mothers of newborns).
- Certifying radon laboratories, mitigators and testers.
- Performing routine inspections of mitigation installations, mitigation offices, testing, and laboratory facilities.
- Performing blind testing on radon-detection devices.
- Providing diagnostic services to homeowners and requesting mitigators for difficult-to-remediate houses.
- Providing "Hot Spot" surveys in areas of high radon activity.
- Providing free confirmatory testing to homeowners who have installed active mitigation systems and to homes with radon levels greater than 100 pCi/L.
- Developing and maintaining databases for tracking data, radon testing, calculations, and surveys; maintaining and configuring databases for certification tracking.
- Providing a wide variety of public information services to increase awareness of the radon issue and encouraging testing and mitigation.
- Providing unbiased and expert advice on all aspects of radon to the general public.
- Performing radon-related research projects and contributing technical information to the radon industry.
- Serving on radon-related national standards committees.

TREND ANALYSIS:

The Department performs significant outreach and public service announcements (PSAs) that stimulate homeowners to test and mitigate. This creates an interdependency between outreach and revenue, allowing the program to maintain stability in certification fee revenue from radon laboratories, mitigators and testers. At this time, however, the certification fee revenue does not cover the Radon Program costs. Grant funding from the EPA SIRG provides some offset of administrative costs, but the program is still not self-sufficient.

The SIRG has been providing \$420,000 annually, which is utilized for staff salaries and benefits, PSAs, equipment and supplies, and home shows. It also provides funds to the American Lung Association for radon outreach. With tight federal budgets, the SIRG funding cannot be relied upon as a stable funding source; it could be reduced or cease altogether at any time.

If federal EPA funding would end, much of the outreach and education carried out by the Radon Program would need to be eliminated; however, a minimal level of outreach would continue through certification program revenue.

RECOMMENDATION AND COMMENT:

The RPP has conducted a fiscal analysis of this program area. This analysis indicates a need for radon certification fee increases in the Radon program area effective in fiscal year 2015-2016 to remain solvent at least through 2020-2021. Because a larger certification fee increase would likely cause many small businesses to cease performing radon work, the RPP is also evaluating a new fee category revenue option to minimize impact on the regulated community. This would be in the form of a fee for each mitigation installation. There are roughly 8,000 to 10,000 new installations each year in Pennsylvania.

The RPP has initiated the Department's process to revise the existing fee schedule in 25 Pa. Code, Chapter 240, Appendix A, and plans to formally present a regulatory revision request to the RPAC and EQB in the fourth quarter of calendar year 2014.

ATTACHMENT 1: Current Fees in 25 Pa. Code

CHAPTER 218. FEES

GENERAL

Sec.

218.1. Purpose and scope.

PAYMENT OF FEES

218.11. Registration, renewal of registration and license fees.

218.11a. Special provisions for calculating fees during agreement state transition period.

218.12. Failure by registrant or licensee to pay required fee.

GENERAL

§ 218.1. Purpose and scope.

(a) This chapter establishes fees for registration and licensing and provides for their payment. For the purpose of this chapter, radiation-producing machines under the same administrative control in a single building are registered or licensed as a single facility. Radiation-producing machines under the same administrative control at the same address or in a contiguous group of buildings may be registered or licensed as a single facility if the Department determines that it is appropriate.

(b) Except as otherwise specifically provided, this chapter applies to a person who:

(1) Is required to register or renew registration for radiation-producing machines or radiation-producing machine service providers under Chapter 216 (relating to registration of radiation-producing machines and radiation-producing machine service providers).

(2) Is an applicant for or holder of a radioactive material license issued under Chapter 217 (relating to licensing of radioactive material).

(3) Is an applicant for or holder of an accelerator license issued under Chapter 228 (relating to radiation safety requirements for particle accelerators).

PAYMENT OF FEES

§ 218.11. Registration, renewal of registration and license fees.

(a) Annual registration fees for radiation-producing machines, other than accelerators, are the sum of an annual administrative fee and an annual fee for each X-ray tube or radiation generating device as follows:

<i>Type Facility</i>	<i>Annual Administrative Fee</i>	<i>Annual Fee per X-ray Tube or Radiation Generating Device</i>
Dentists, podiatrists, veterinarians	\$ 100	\$50
Hospitals	\$725	\$50
Other Facilities	\$350	\$50

(b) A registrant filing an initial registration under § 216.2 (relating to registration of radiation-producing machines) or an application for renewal of a certificate of registration under § 216.4 (relating to renewal of certificate of registration) shall remit the appropriate fee calculated by using the information on the registration or application form and the fee schedule in subsection (a). Fees for any initial registration under § 216.2 are payable upon the filing of the registration. Fees for the renewal of a certificate of registration are payable upon the submission of an application for a renewal of a certificate of registration. If the number of tubes increases after an initial registration or after an application for renewal has been filed with the Department, no additional fee is required until the time of the next registration. Likewise, if the number of tubes decreases during the year, no refund will be made for that year.

(c) Annual license fees for radioactive material are set forth in Appendix A (relating to fees for radioactive material licenses).

(1) No refund will be made for termination of a license.

(2) If, by amendment or otherwise, a license changes to another fee category, the fee for the new category will take effect on the anniversary date of the license.

(d) Particle accelerators are licensed under Chapter 228 (relating to radiation safety requirements for particle accelerators). Annual fees are as follows:

(1) Accelerators, below 50 MeV, other than for ion implantation—\$2,100 for the first accelerator at the facility plus \$700 for each additional unit at that facility.

(2) Accelerators used for ion implantation—\$700 plus \$70 for each additional unit at the same facility.

(3) Accelerators 50 MeV and above—full cost of staff time to review license applications and conduct inspections as needed. (Hourly rate is \$150 per hour). For the purpose of anticipating costs and compliance with subsections (e) and (f), a minimum annual fee of \$2,100 for the first accelerator at the facility plus \$700 for each additional unit is established. Additional invoices will be issued by the Department at regular intervals at least quarterly when net costs are incurred above the minimum annual fee.

(e) An initial application for a license or reciprocity shall be accompanied by a check payable to the Department in accordance with the fee schedules in subsections (c) and (d). Thereafter, the Department will issue an annual fee invoice in accordance with the appropriate fee schedule at least 2 months prior to the license expiration. Fees are payable by the last day of the license expiration month as shown on the license fee invoice. This provision is not applicable to full cost recovery licenses specified in Appendix A.

(f) The Department will not accept an initial application for a license prior to payment of the fees required by subsections (c) and (d).

(g) If the registration involves more than one of the facilities in subsection (a), or if a license involves more than one of the categories in subsection (c), the highest applicable fee applies.

(h) A radiation-producing machine service provider shall pay an annual registration fee of \$140.

(i) The Department will review the adequacy of the fees established in this section at least once every 3 years and provide a written report to the EQB. The report must identify any disparity between the amount of program income generated by the fees and the costs to administer these programs, and must contain recommendations to increase fees to eliminate the disparity, including recommendations for regulatory amendments to increase program fees.

§ 218.11a. Special provisions for calculating fees during agreement state transition period.

(a) The fees for the NRC licenses that are transferred to the Commonwealth on the date the Commonwealth becomes an agreement state will be invoiced on the license's next anniversary date.

(b) During the first year after the date the Department attains agreement state status, the annual fee for each NRC license transferred to the Commonwealth will include a proportional amount, based on the schedule of fees in Appendix A, for the period from the date agreement state status is attained until the license's next anniversary date, in addition to the amount assessed for the year following the license's anniversary date.

(c) In the event that the Commonwealth attains agreement state status prior to January 1, 2009, the provisions of this section and § 218.11 and Appendix A (relating to registration, renewal of registration and fees; and fees for radioactive material licenses) will be applied retroactively to NRC licenses transferred to the Commonwealth.

§ 218.12. Failure by registrant or licensee to pay required fee.

(a) A registrant or licensee who fails to pay an annual fee required under this chapter shall be subject to the civil and criminal penalties provided under the act.

(b) Nonpayment of fees required by this chapter shall be cause for revocation of licenses or registrations issued by the Department under the act.

APPENDIX A

Fees for Radioactive Material Licenses

<i>Fee Category</i> ^{5,6}	<i>Description</i>	<i>Annual Fee (\$)</i> ^{1,2,3,4,7}
1C	Special Nuclear Material Sealed Source Gauges (X-Ray Fluorescence)	2,100
1D	Special Nuclear Material—Other	5,800
2A(2)(c)	Source Material—metal extraction	90,200
2A5	Removal of Radioactive Contaminants from Drinking Water	11,200
2B	Source Material as Shielding	750
2C	Source Material—Other (not 11e2)	13,400
3A	Manufacturing & Distribution Commercial Broad Scope—10 CFR 30, 33	29,100
3B	Manufacturing, Refurbishing & Distribution Commercial Specific License—10 CFR 30	8,300
3C	Manufacturing & Distribution Pharmaceuticals—10 CFR 32.72—32.74	11,900
3D	Pharmaceuticals—Distribution Only—10 CFR 32.7x	6,800
3E	Irradiator—Shielded Source	4,200
3F	Irradiator—Unshielded < 10kCi	7,800
3G	Irradiator—Unshielded ≥ 10kCi	31,200

3I	Distribution As Exempt—No Review of Device	10,700
3J	Distribution—SSD Devices to Part 31 GLs	2,500
3K	Distribution—No Review-Exempt Sealed Source	1,900
3L	Research & Development Broad Scope	15,100
3M	Research & Development	5,600
3N	Services other than Leak Testing, Waste Disposal or Calibration	8,500
3O	Radiography	14,100
3P	Other Byproduct Material	2,700
3Q	Generally licensed devices under § 217.143 (relating to certain measuring, gauging or controlling devices)	320
3R1	Greater than the General License Limits in 10 CFR 31.12(a)(3), (4) or (5) but not more than ten times those Limits	2,100
3R2	Greater than ten times the General License Limits in 10 CFR 31.12(a)(3), (4) or (5)	2,700
3S	Manufacturing & Distribution Pharmaceuticals—Accelerator Produced Only	11,800
4A	Waste Storage, Processing or Disposal	Full Cost *
4B	Waste Packaging or Repackaging	12,000
4C	Waste Receipt of Prepackaged for Disposal	9,200
5A	Well Logging & Non Field Flood Tracers	4,400
5B	Well Logging Field Flood Tracer Studies	Full Cost *
6A	Nuclear Laundry	28,800
7A	Human Use—Teletherapy	13,700
7B	Human Use—Broad Scope (except Teletherapy)	29,000
7C	Human Use—Specific License (except Teletherapy)	4,900
8A	Specifically licensed sources used in static eliminators, nonexempt smoke detectors, fixed gauges, dew pointers, calibration sources, civil defense uses or in temporary (2 years or less) storage	2,100
14	Decontamination, Decommissioning, Reclamation or Site Restoration	Full Cost *
16	Reciprocity (180 days/year)	1,500
SB1 ₅	Small Business—Category 1	2,300
SB2 ₆	Small Business—Category 2	500

¹ A license may include as many as four noncontiguous sites at the base fee. Sites that are within 5 miles of the main radiation safety office where the license records are kept will be considered contiguous. An additional fee of 25% of the base fee will be added for each noncontiguous site above four.

² All fees will be effective upon publication of the final rules in the *Pennsylvania Bulletin*. Existing NARM licenses will be changed to the corresponding category of byproduct material license in Appendix A upon publication of the final rule.

³ Annual fees for categories of NRC licenses that are not included in this table will be calculated as follows: PA Fee = (NRC Annual Fee + 0.10 NRC Application or Renewal fee).

⁴ Annual fees charged to holders of transferred NRC licenses with multiple sites will not exceed the fees charged by the NRC for the same licenses that are in effect in the year of transfer, provided the number of noncontiguous sites does not increase.

⁵ Small Businesses Not Engaged in Manufacturing, and Small Not-For-Profit Organizations with Gross Annual Receipts of more than \$350,000 and less than \$5 million; Manufacturing Entities that have an average of 35—500 employees with Gross Annual Receipts of more than \$350,000 and less than \$5 million; Small Government Jurisdictions (including publicly supported, nonmedical educational institutions) with a population between 20,000 and 50,000; and nonmedical Educational Institutions that are not state or publicly supported and have 35—500 employees.

⁶ Small Businesses Not Engaged in Manufacturing, and Small Not-For-Profit Organizations with Gross Annual Receipts of less than \$350,000; Manufacturing Entities that have an average of less than 35 employees and less than \$350,000 in Gross Annual Receipts; Small Government Jurisdictions (including publicly supported nonmedical educational institutions) with a population less than 20,000; and nonmedical Educational Institutions that are not state or publicly supported and have less than 35 employees.

⁷ Full cost recovery licensees and licensees required to provide financial assurance for decommissioning are not eligible for reduced fees under category SB1 or SB2.

* Full cost recovery consists of a professional fee, to cover the activities and support of Department personnel, and any other additional incidental charges incurred, such as related contracted services or laboratory costs. The professional fee component (Hourly Rate) is \$150 per hour. Other costs are recovered at 100% of actual cost. Invoices shall be issued by the Department at regular intervals but at least quarterly when net costs are incurred.

CHAPTER 240. RADON CERTIFICATION

APPENDIX A

Radon Certification Fee Schedule

Testing Individual	\$350 every 2 years
Testing Employee	\$100 every 2 years
Testing Firm	\$700 every 2 years
Mitigation Individual	\$300 every 2 years
Mitigation Firm	\$700 every 2 years
Laboratory Individual	\$400 every 2 years
Laboratory Firm	\$750 every 2 years
Primary Testing Device Listing	\$100 every 2 years (1)
Course Provider	\$375 every 2 years (2)
Late Application Renewal	\$100
Late 45-Day Reporting	\$100 (3)

The Department will review the adequacy of the fees established in this schedule at least once every 3 years and provide a written report to the EQB. The report must identify any disparity between the amount of program income generated by the fees and the costs to administer these programs, and must contain recommendations to increase fees to eliminate the disparity, including recommendations for regulatory amendments to increase program fees.

(1) Primary radon testers shall submit the Primary Testing Device Fee as specified in the Radon Certification Fee Schedule for each device they read or analyze, or both.

(2) A person approved by the Department to provide initial or continuing, or both, education courses shall submit the Course Provider Fee as specified in this appendix.

(3) Anyone not submitting the required 45-day testing or mitigation, or both, reporting within 90 days of the completion of the testing or mitigation, or both, activity (or if no activities have been performed during this period of informing the Department of same in writing) will be subject to the Late 45-Day Reporting Fee as specified in this appendix.