

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

The Department of Environmental Protection's (DEP or Department) Radiation Protection Program (RPP) was created under Act 147 of 1984 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." The RPP includes the functions of both the Central Office Bureau of Radiation Protection (BRP) and the Regional Offices.

As required by 25 Pa. Code Section 218.11(i) and Chapter 240, Appendix A, DEP prepared a Three-Year Regulatory Fee and Program Cost Analysis Report (Report) for the period of 2015-2018, which was presented to Environmental Quality Board (EQB) in August 2014. The three program areas this cost analysis addresses are Accelerator, X-ray and Vendors/Service Providers; Radioactive Materials and Decommissioning; and Radon. The last fee increase for these program areas was effective in 2009.

For purposes of this proposed rulemaking, this Report was amended to project program costs through 2020-2021. Following is a summary of the RPP fee collections and program costs by functional area.

**ACCELERATOR, X-RAY AND VENDORS/SERVICE PROVIDERS**

**BACKGROUND:**

Through a staff of 108 located in the central and regional offices, the RPP's Radiation Control Division administers the X-ray machine registration and inspection program, the Mammography Quality Standards Act program, the particle accelerator licensing and inspection program and the vendor/service provider registration program.

**X-ray Registration and Inspection Program:**

The Radiation Control Division is responsible for the registration and inspection of over 11,000 facilities possessing over 33,000 X-ray units.

In order to ensure that patients, personnel and the environment are protected, that operators are properly trained, and radiation equipment and facilities meet current protection standards, the department has a goal to routinely inspect all facilities at least once every four years or as necessary to ascertain compliance or non-compliance with applicable regulations. Major facilities may be inspected every two to three years. Approximately 2,800 site inspections are conducted each year.

Users of radiation-producing machines are required to register with the division, indicate the number and type of units possessed, and designate an individual responsible for radiation safety. Users pay registration fees based on the type of facility and the number of X-ray units they have. The division

oversees the production and issuance of associated registration certificates, renewal letters, and invoices and the collection of initial and annual fees.

Mammography Quality Standards Act Activities:

The Federal Mammography Quality Standards Act (MQSA) was signed into law on Oct. 27, 1992. The MQSA ensures that the public receives high-quality mammography services for early breast cancer detection through the establishment of a federal certification and inspection program. The Act authorizes the U.S. Food and Drug Administration (USFDA) to obtain state and local assistance in enforcing the MQSA requirements, including annual inspections of all certified mammography facilities. DEP, under a \$405,000 reimbursement contract with the USFDA, conducts inspections of each of the state's more than 300 facilities which perform mammographic X-ray procedures. These inspections are conducted on a schedule prescribed by the USFDA. This schedule calls for a facility to be inspected once every 12 months.

Accelerator Licensing and Inspection:

The Commonwealth of Pennsylvania requires licensing of all particle accelerators within the state for industrial use, research, or medical purposes. A person who intends to purchase, construct or acquire an accelerator shall notify the department of this intent by filing the appropriate application for a specific license within 30 days after the initial order is issued to obtain any or all parts of the accelerator. There are 152 facilities that have licensed accelerators within the Commonwealth.

Vendor/Service Provider Registration:

The Commonwealth of Pennsylvania administers a registration program for vendors/service providers who sell, lease, install and/or service radiation-producing machines. The state regulations require that each vendor/service provider doing business within the Commonwealth must be registered prior to providing such services. To register, each vendor/service provider must complete a registration application and return that application with the associated fee to BRP. The registration is renewable for 12-month periods following submission of the applicable fee.

**REVENUE TREND AND PROJECTION:**

The combined revenue from these program areas has been relatively stable. It should be noted, however, that implementation costs are expected to continue to increase. This analysis assumes a three percent increase in all costs annually for future years.

**RECOMMENDATION AND COMMENT:**

The RPP has conducted a detailed fiscal analysis of these program areas. Based on current fee collections and existing available funds in these program areas, there is sufficient revenue to cover expenses beyond FY 2019-20. Therefore, no fee increase is recommended for these programs at this time.

**Accelerator, X-ray and Vendors/Service Providers**

	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>
Fee Collection*	\$4,295	\$4,333	\$4,254	\$4,261	\$4,261	\$4,261	\$4,261	\$4,261	\$4,261
Fines and Penalties*	\$88	\$203	\$132	\$125	\$125	\$125	\$125	\$125	\$125
Total Revenue*	\$4,383	\$4,536	\$4,386	\$4,386	\$4,386	\$4,386	\$4,386	\$4,386	\$4,386
Program Costs*	\$3,332	\$3,426	\$4,061	\$4,156	\$4,280	\$4,409	\$4,541	\$4,677	\$4,818

\*In thousands of dollars.

**RADIOACTIVE MATERIALS & DECOMMISSIONING**

**BACKGROUND:**

DEP’s Radiation Control Division is also responsible for the licensing and inspection of radioactive material and, along with the Decommissioning Section of the Decommissioning and Surveillance Division, is responsible for regulation of radioactive material (e.g., by-product, source, and special nuclear material).

Radioactive Material Licensing and Inspection:

Users of all by-product, source and special nuclear material are required to obtain a license from DEP prior to obtaining those radioactive materials. This material is used in hospitals, colleges and industries for medical, research and industrial purposes. The department issues specific, general and reciprocity licenses for the use of radioactive material. The objective of the licensing program is to ensure radioactive material is used safely, disposed of properly, and facilities are free from contamination when licensed operations are terminated.

Decommissioning:

The Decommissioning Section performs technical reviews of decontamination and decommissioning activities for radioactive materials licensees and non-licensed radiologically contaminated sites in accordance with appropriate state and federal regulations. Typical reviews include site characterization plans, health and safety plans, decommissioning plans, survey reports and the evaluation of decommissioning funding plans and financial assurance mechanisms. The Decommissioning Section also performs on-site reviews and inspections of decontamination and decommissioning activities for occupational, public and environmental radiation protection concerns. These activities include performing confirmatory surveys and sampling to ensure the cleanup levels established for the site have been met.

**REVENUE TREND AND PROJECTION:**

Fee collections for radioactive material licensing 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 to be licensed under a small business fee category at a lower cost, which is specified in Chapter 218, Appendix A.

Actual RPP personnel costs (salaries and benefits) have increased approximately 45% since the last fee increase in 2009, while fees have remained fixed. This analysis assumes 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 work performed by the Decommissioning program is subject to full cost recovery from the facility owner. Currently the DEP hourly rate charge for these activities is \$150. Costs of decommissioning activities at sites where no responsible party exists are paid from the Radiation Protection Fund.

**RECOMMENDATION AND COMMENT:**

The RPP has conducted a detailed fiscal analysis of these program areas. With one exception, this analysis indicates that a 50 percent fee increase for license categories in the Radioactive Materials and Decommissioning areas effective in FY 2016-17, combined with existing reserve funds in the program, will provide sufficient revenue through 2020-21. It is also recommended that the DEP hourly rate for decommissioning activities be increased by 50% to \$225.

The fee increase exception is for license category 2A(2)(c) – Source Material – metal extraction, which is proposed to be reduced by 50 percent. There is currently no licensee in the Commonwealth of Pennsylvania in this Source Material category. If a facility were to register under this source category, DEP oversight costs would be minimal.

As indicated in the following table, without the proposed fee increases, there will not be sufficient revenue to cover expenses beyond FY 2017-18.

## Radioactive Materials Licensing

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Fee Collection*	\$3,343	\$3,326	\$3,325	\$3,325	--	--	--	--	--
Fee Coll. with proposed 50% increase beginning in 2016-17*	--	--	--	--	\$4,987	\$4,987	\$4,987	\$4,987	\$4,987
Fines and Penalties*	\$88	\$204	\$133	\$125	\$125	\$125	\$125	\$125	\$125
Total Revenue*	\$3,431	\$3,530	\$3,458	\$3,450	\$5,112	\$5,112	\$5,112	\$5,112	\$5,112
Program Costs*	\$3,819	\$3,931	\$4,693	\$4,807	\$4,951	\$5,099	\$5,252	\$5,410	\$5,572

\*In thousands of dollars.

## RADON

### **BACKGROUND:**

Pennsylvania has some of the highest indoor air radon levels in the country. According to 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 EPA State Indoor Radon Grant (SIRG) (e.g., education and outreach through public service announcements (PSAs), 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 on 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 calculations, tracking data, and surveys; maintaining and configuring DEP databases with BIS 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 committees.

**REVENUE TREND AND PROJECTION:**

The Department performs significant outreach and PSAs that stimulate homeowners to test and mitigate. This creates interdependency between outreach and revenue, allowing the program to maintain stability in certification fee revenue from radon laboratories, mitigators and testers. Historically, certification fee revenue has not covered Radon Program costs. Grant funding from the EPA SIRG provides some offset of administrative costs, but the program is still not self-sustaining.

The SIRG has been reduced in recent years to \$429,000 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 further or cease altogether at any time.

**RECOMMENDATION AND COMMENT:**

The RPP has conducted a detailed fiscal analysis of this program area. This analysis indicates that a 50 percent radon certification fee increase effective in FY 2016-17, together with a new Radon Mitigation System Tag fee of \$50 per installation, augmented by the existing fund balance, will provide sufficient funds to maintain the current Radon Program through FY 2020-21. There are approximately 8,000 to 10,000 new installations each year in Pennsylvania, and this analysis assumes 8,000 installations annually for future years. DEP believes that the Radon Mitigation System Tag fee is less economically burdensome than a higher certification fee on the many small businesses that perform lower volumes of radon mitigation work.

The following table provides revenue and program cost projections:

### Radon Program

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Fee Collection *	\$172	\$162	\$182	\$182	--	--	--	--	--
Fee Coll. with proposed 50% increase beginning in 2016-17*	--	--	--	--	\$273	\$273	\$273	\$273	\$273
Tag Fee**	--	--	--	--	\$400	\$400	\$400	\$400	\$400
Fines and Penalties*	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50	\$50
SIRG ***	\$463	\$482	\$429	\$429	\$429	\$429	\$429	\$429	\$429
Total Revenue*	\$685	\$694	\$661	\$661	\$1,152	\$1,152	\$1,152	\$1,152	\$1,152
Program Costs*	\$1,111	\$1,159	\$1,177	\$1,190	\$1,226	\$1,262	\$1,300	\$1,339	\$1,380

\*In thousands of dollars.

\*\*\$50 fee for each mitigation installation; approx. 8,000 installations per year.

\*\*\*State Indoor Radon Grant (SIRG)