APPLICATION AND FEE SCHEDULE FOR NON-MEDICAL ACCELERATOR LICENSES

This form is not for use with X-Ray machines
APPLICATION FOR MEDICAL AND NON-MEDICAL ACCELERATOR LICENSES

The Pennsylvania Department of Environmental Protection, Bureau of Radiation Protection welcomes your request for this accelerator license.

This portion of the application provides general license information that will be of value to you when you complete the written portions of the license application.

The Department issues licenses for medical and non-medical accelerators under the provisions of the Radiation Protection Act and respective regulations Title 25 Chapter 228, which set forth requirements both to become and to remain licensed. The Department is responsible for enforcing the Radiation Protection Act and our regulations.

It is imperative that you become familiar with our radiation protection regulations in the Pennsylvania State Code, Title 25 Environmental Protection, available at www.pacode.com or a hard copy available upon request.

Notification and License Requirements

• A person who intends to purchase, construct or acquire an accelerator shall notify the Department of this intent by filing an application for a specific license within 30 days after the initial order is issued to obtain any or all parts of the accelerator.

• A person who intends to install an accelerator shall notify the Department in writing within 30 days after the initial construction or installation begins.

• The application shall be filed in duplicate on forms prescribed by the Department, within the timeframe indicated in the application transmittal letter.

• The application shall contain pertinent information to permit the Department to evaluate the accelerator facility for compliance with the requirements of the act and Title 25 Chapter 228.

Transfer or Assignment

• An accelerator license issued by the Department may not be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, to any entity without submitting a written request to the Department.
Payment of Licensing Fees, Medical or Non-Medical Accelerators:
An initial application for a license shall be accompanied by a check payable to DEP in accordance with the fee schedule below:

<table>
<thead>
<tr>
<th>Accelerator Type</th>
<th>Annual Fee For 1 Unit</th>
<th>Each Additional Unit (Same Site)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than 50 MeV</td>
<td>$2,100.00</td>
<td>$700.00</td>
</tr>
<tr>
<td>Ion Implantation Only</td>
<td>$700.00</td>
<td>$70.00</td>
</tr>
<tr>
<td>Greater Than 50 MeV</td>
<td>$2,100.00</td>
<td>$700.00</td>
</tr>
</tbody>
</table>

**To be invoiced based on Actual Cost recovery for licensing and inspection at $150.00 per hour.**

The Department will not accept an application without payment.
- Fees for initial accelerator license application are payable upon the filing of the license application under Section 228.11.
- If you need assistance calculating fees, please call the DEP Bureau of Radiation Protection at 717-787-3720.

Annual Renewal of Accelerator License
- The initial license is effective for five (5) years.
- The Department will send an annual renewal invoice for each accelerator license at your facility two months before the expiration date of the license certificate. The annual renewal becomes valid upon fee receipt.
- Fees are payable by the last day of the license month as shown on the license fee renewal invoice.
- If you do not receive the renewal form two months prior to expiration, you must notify the Department immediately.
- If there is an increase in the number of accelerators after an initial accelerator license has been issued, an amendment to the license must be submitted. A Part II application form shall be submitted for each accelerator at each facility.
- Likewise, if there is a decrease in the number of accelerators during the year, the Department must be notified, however, no refund will be made.
- If a license is revoked or voluntarily terminated before its expiration date, the license fee will not be refunded. The notification and request for termination shall include the reports and information that is specified in 228.23a.
How to Apply and Where to Pay

- Complete an application for a Medical or Non-Medical Accelerator License on the prescribed license forms.

- Retain a copy of the completed license application with your accelerator(s) records.

- Mail the original and a copy of the complete license application, along with a check or money order in the proper fee amount. **You must include payment with your application in the correct amount or your application will be returned to you and your application will not be processed.**

- Mail the complete application and the check or money order, payable to "Commonwealth of Pennsylvania" to:

  DEP  
  Bureau of Radiation Protection  
  P.O. Box 8469  
  Harrisburg, PA 17105-8469

Failure by licensee to pay required fee  
(as set forth by Chapter 218.11)

- An accelerator licensee who fails to pay an initial fee, or a renewal fee required under this chapter shall be subject to the civil and criminal penalties as provided under the Act.

- Nonpayment of fees required by this chapter shall be cause for revocation of license issued by the Department under the Act.

More Information

For more information, please visit the Bureau of Radiation Protection website at [http://www.dep.state.pa.us/brp/](http://www.dep.state.pa.us/brp/).
APPLICATION INSTRUCTIONS FOR A NON-MEDICAL ACCELERATOR LICENSE

PART I – FACILITY INFORMATION

GENERAL INFORMATION

"A person who intends to purchase, construct or acquire an accelerator shall notify the Department of this intent by filling an application for a specific license within 30 days after the initial order is issued…" Section 25 §228.21a.

Notification by submitting an application is necessary even though all information may not be readily available. Additional data may be forwarded as the information is obtained.

To speed up the processing and assist facilities submitting Non-Medical Accelerator Licenses applications, the Department has made instructions available so applicants may understand the nature of information being sought and thereby respond correctly to the application information. The Department reserves the right to determine how non-medical accelerators will be licensed. A non-medical accelerator license application must be submitted for each non-medical accelerator at a facility. A Non-Medical Accelerator is one where the beam (e.g. photon, electron, proton, etc.) will not be directed on a human or animal. The non-medical accelerator license application makes reference to various sections of PA Title 25 Environmental Protection regulations. The most recent copy of the current regulations is available on-line at http://www.pacode.code

INSTRUCTIONS:

Please type or print all information when completing the application. Some questions can be answered simply by check-off or with brief answers, but if information needed is more than space allows, copy that question on a supplemental sheet form and complete as required.

New applications, or a non-medical accelerator facility under construction, initially need to complete as much licensing application information as possible. The remaining information must be supplied when available. The fee for a new license must be included with the initial application submittal. Section 25 §218.11(f). If a new unit is added to a current license no additional payment is necessary. The additional unit will be invoiced when the next annual statement is issued.

NOTE: A person may NOT operate a particle accelerator without having obtained a license from the Department. A license will be issued only after a completed application is received and a departmental inspector performs a confirmatory inspection.

1a. LEGAL ENTITY NAME AND EMPLOYER IDENTIFICATION NUMBER (EIN)

The Legal Name of a person or organization actually owning the non-medical accelerator(s), and requesting a license from the Department to conduct non-medical use of the accelerator. An indication should also be included in this box as to whether the applicant is an individual, an in-state or out-of-state corporation (if not Pennsylvania indicate State), a member of a partnership (include names of all partners and indicate whether limited or general partners), or any other entity (specify). The Employer Identification Number (EIN) is also required. The EIN, which is also known as a tax identification number, is the number assigned to the provider by the Federal Government for tax reports purposes.

1b. FACILITY NAME

The Facility Name given to be recorded on the license or doing-business-as (dba).

2. CURRENT PENNSYLVANIA XRAY REGISTRATION NUMBER

Provide the current Pennsylvania X-Ray Registration Number if already assigned.

3. OFFICIAL USE ONLY
4. MAILING/Correspondence Address

Fill in the location of the main office or headquarters of the facility, where its usual business affairs are conducted, and also provide the area code and phone number of the facility. The mailing address should not include data that is not appropriate for business correspondence. In addition to the street name and number, PO Box number, etc., use any appropriate designation and numbers to further define the mailing address of the applicant. (e.g., apartment, floor, building, room, department, suite, etc.) Make sure to include the city, state, ZIP+4 and postal code. Do not use abbreviations for the city name. Use the two-character abbreviation for the state. Include the four-digit extension for the ZIP code. If other than USA, provide country.

5. LOCATION Address

Fill in the location(s) where the regulated facility conducts its activities and the non-medical accelerator(s) is operated. The address should not have abbreviations, acronyms, etc. No PO Box Numbers will be accepted for site location information. Provide the street name and number, city, state and the zip+4.

6. RADIATION SAFETY OFFICER

The RSO for the non-medical accelerators is the designated individual who is ultimately responsible using the equipment safely. Section 25 § 215.2 defines RSO as an individual who has the knowledge and responsibility to apply appropriate radiation protection regulations. Regulations require the RSO to be vested with the authority to cease operation of the accelerator(s) in event of unsafe conditions. One individual is to be named the RSO of a facility. In 6b provide the address and phone number of the RSO, if it is different than #5. In 6c, provide a summary of the training and experience of the RSO. The RSO named in item 6a will be recorded on the license.

7. AUTHORIZED USERS

Authorized users are qualified professional individuals whom the applicant designates as bearing immediate responsibility for the supervision and operation of the accelerator(s). Name and qualifications are required for each of the authorized users. The name recorded in item 7a will be recorded on the license.

8. CERTIFICATION

Signature, Name, Date and Title of an employee, or a hired contractor of the organization owning the accelerator facility described in this license application, who was responsible for completing this application.

9. ACKNOWLEDGEMENT

Signature, Name, Date, and Title of an executive of the organization with the overall responsibility and authority for supervising operation of the facility and accelerator(s) listed in this license application.

Complete Part II
Accelerator Information
for Each Non-Medical Accelerator at the Facility
# Application for Non-Medical Accelerator License

## Part I – Facility Information

Please type or print all information. Attach extra sheets when necessary.

<table>
<thead>
<tr>
<th>1a. Legal Entity Name and Employer Identification Number (EIN)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
<td><strong>EIN:</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>1b. Facility Name (dba)</th>
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<tbody>
<tr>
<td><strong>Name:</strong></td>
<td></td>
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<tr>
<th>2. Provide Previous PA X-Ray Registration Number If Previously Assigned</th>
<th>3.</th>
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<tr>
<th>4. Mailing/Correspondence Address</th>
<th>Area Code and Phone Number</th>
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<tr>
<td>Area Code and Phone Number:</td>
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<td>Attn:</td>
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<table>
<thead>
<tr>
<th>5. Accelerator(s) Facility Location Address</th>
<th>Area Code and Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Code and Phone Number:</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>6a. Name of Radiation Safety Officer</th>
<th>6b. Address, Phone Number, E-mail Address</th>
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</thead>
<tbody>
<tr>
<td>Individual to be recorded on the license.</td>
<td>Radiation Safety Officer.</td>
</tr>
<tr>
<td>Phone:</td>
<td>Phone:</td>
</tr>
<tr>
<td>E-Mail:</td>
<td>E-Mail:</td>
</tr>
<tr>
<td>Address if different than #4 or #5:</td>
<td>Address if different than #4 or #5:</td>
</tr>
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<tr>
<th>6c. Provide summary of training and experience.</th>
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**FOR BRP USE ONLY**

<table>
<thead>
<tr>
<th>Date Received</th>
<th>Site Number</th>
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<tbody>
<tr>
<td>Completeness Reviewed by</td>
<td>Client Number</td>
</tr>
<tr>
<td>Entered into eFacts by</td>
<td>Account Number</td>
</tr>
<tr>
<td>Date Acknowledged</td>
<td>Check Number</td>
</tr>
</tbody>
</table>

- 1 -
7. **Authorized User(s):** Name(s) of individuals that are authorized to operate the non-medical accelerator(s). List any specialty training or Operator Certification with date, and the name of the institution(s) and date where accelerator training and experience was received. Attach extra sheets if necessary.

<table>
<thead>
<tr>
<th>7a. Name of Lead User (to be recorded on the license):</th>
<th>7b. Name:</th>
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<tbody>
<tr>
<td>Qualifications: ________________________________</td>
<td>Qualifications: ________________________________</td>
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<tr>
<th>7c. Name:</th>
<th>7d. Name:</th>
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<tbody>
<tr>
<td>Qualifications: ________________________________</td>
<td>Qualifications: ________________________________</td>
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<tr>
<th>7e. Name:</th>
<th>7f. Name:</th>
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<tbody>
<tr>
<td>Qualifications: ________________________________</td>
<td>Qualifications: ________________________________</td>
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</table>
8. **Certification:** As an employee, or a hired contractor of the organization owning the non-medical accelerator facility described in Parts I and II of this application, I hereby verify that the information and representations in this application for a non-medical accelerator license are, to the best of my knowledge, accurate, truthful and complete. I understand that this certification is made subject to the penalties of 18 Pa. C.S.A. §4904 relating to unsworn falsification to authorities.

   Date: ___________________________   Printed Name: ___________________________

   Title: ___________________________   Signature: ___________________________

9. **Acknowledgement:** The undersigned is an executive of the applicant organization, with overall responsibility and authority for supervising operation of the non-accelerator(s) listed in this license application. It is understood and agreed that all data and statements contained in Parts I & II shall be made a part of the non-medical accelerator license and thereby will constitute required conditions for the issuance and continuation of the non-medical accelerator license. It is also understood and agreed that the Department shall be notified, in writing, within ten (10) days, in the event of any changes or departures whatsoever from the statements and representations contained herein, that exceed ministerial changes.

   Date: ___________________________   Printed Name: ___________________________

   Title: ___________________________   Signature: ___________________________

**End of Part I**

*Complete Part II of this form for each Non-Medical Accelerator at the Site.*

Return this form with all attachments to:

PA Department of Environmental Protection
Bureau of Radiation Protection
Division of Radiation Control
P.O. Box 8469
Harrisburg, PA 17105-8469
APPLICATION INSTRUCTIONS FOR A NON-MEDICAL ACCELERATOR LICENSE

PART II ACCELERATOR INFORMATION

To be completed for each individual accelerator at the facility listed in Part 1

GENERAL INFORMATION

To speed up the processing and assist facilities submitting Non-Medical Accelerator License applications, the Department is making available these instructions so that applicants may understand the nature of information being sought and thereby respond correctly to the application information. The license application makes reference to various sections of PA Title 25 Environmental Protection Article V. The most recent copy of the current regulations can be checked on-line at www.pacode.ode.

Please type or print all information for each non-medical accelerator when completing the forms. Some questions can be answered simply by check-off or with brief answers, but if information needed is more than the provided space allows, copy that question on a supplemental sheet and complete as required. Return completed application(s) with the appropriate fees.

NOTE: A person may NOT operate a particle accelerator without having obtained a license from the Department. A license will be issued only after a completed application is received and a departmental inspector performs a confirmatory inspection.

The same prerequisite is necessary prior to issuance of an amendment to an existing license for a new accelerator being added to the license.

1. Facility Name
   The Facility Name given to be recorded on the license or doing-business-as (dba).

2. License Category
   Check the type of accelerator: an New Accelerator or Remanufactured Accelerator.

3. If Applicable Provide a Current PA Accelerator License Number
   Provide the current Pennsylvania Accelerator License Number if applicable.

4. ACCELERATOR DESCRIPTION
   Fill in the manufacture’s name, model, serial number and manufacture year.

5. INSTALLATION/DELIVERY DATES
   Complete the date when the accelerator was ordered, the date of installation, or if it applies, the expected delivery date and room number.

6. Accelerator Energy Data
   Fill in the beam type(s) and the energies in units of MeV that correspond. If the accelerator is a dual beam, which means it produces energies with photons and electrons, then make sure to include energies in units of MV or MeV for both types. If the accelerator produces a beam type that is not made of photons or electrons then list the type of beam and its energy level(s).

7. Describe The Target Materials To Be Used
   Give the type of materials to be used as target material with the accelerator.

8. Describe The Applicable Radiation Safety Procedures
   Provide a list of all radiation safety procedures in use during accelerator operation.

9. Describe How The Accelerator Will Be Used
   Describe the purpose and use of equipment.

10. Estimate of maximum beam on time in one hour, maximum field size, and estimate workload per week.

11. Attach layout of the facility or location of use (if accelerator is not in a housed facility.) Indicate location of each of these components.

   Attach layout plan depicting accelerator vault or facility and make sure to show location and label the accelerator, control panel, independent radiation monitor location, scram buttons, interlocks, beam stop system, if applicable, and warning devices, such as lights signs, klaxons, etc. Indicate function and type of occupancy of all
areas above, below and adjacent to the accelerator room.

12. Describe or attach a layout of the utilization loop if used.

13. Survey & Monitoring Equipment:
   List and describe survey and monitoring equipment utilized to perform and monitor. Include manufacturer and model as well as the calibration date of the meter.


15. Describe the interlock system, function and its operations.

16. Describe the beam stop system (if applicable) retractable? restrictions?)

17. Describe the warning devices, lights, signs, klaxons, etc.

18. Describe collimation of the system.

19. Access control, is a failsafe door interlock switch present. Can the door be manually opened from inside the accelerator vault?

20. Describe the viewing and communications system and any provisions for back up.

21. Provide a shielding design and calculations for new or reinstalled equipment.
   Attach separate sheet at the end of the application form.

22. Provide a copy of Radiation Safety Survey, which validates adequacy of the shielding. Report should compare calculated values with actual measurements.
   Attach separate sheet at the end of the application form.

23 Describe the preventative maintenance program and the maintenance log process.

24. Provide the name and phone number of the administrator overseeing and supervising the accelerator facility.

25. Provide the name of the repair/service organization or indicate if the service is handled in house.

26. Confirm copies of procedures, directives or guidelines relating to operation and emergencies have been provided to accelerator operating and service personnel as required in 25 PA § 228.35.
   Provide a list of all operating procedures with the license application.

27. How are events or other departures from normal use reported and reviewed?
   Describe policies or guidelines followed at your facility.

28. Describe initial training and continuing education program for accelerator operators.
   Indicate nature of training and how frequently it is offered.

NOTE:
New facilities are to answer all questions on the basis of anticipated policies or data estimates, skip questions for which answers are unavailable, and provide the information as it becomes available. Submit the accelerator application with the required fee to initiate the licensing process.
APPLICATION FOR A NON-MEDICAL ACCELERATOR LICENSE

PART II – ACCELERATOR INFORMATION

To be completed for each individual accelerator at the facility listed in Part I

Please type or neatly print all information. Attach extra sheets when necessary.

1. Facility’s Name
   Name:

2. Category:
   - [] New Accelerator
   - [] Remanufactured Accelerator

3. If Applicable Provide Current PA Accelerator License Number:
   
   AC

4. Accelerator Description:
   Make:
   Model:
   Serial Number:
   Manufacture Year:

5. Installation/Delivery Dates. Answer all that apply.
   Date Ordered:
   Date Installed:
   Expected Delivery Date:
   Room Number:

6. Accelerator Energy Data:
   Photons ________________ MV
   Electrons ________________ MeV
   Other Particles ________________ MeV
   Other Particle Type ________________

7. Describe target materials to be used. ________________

8. Provide a list of all applicable radiation safety procedures. ________________

9. Purpose: Describe how the accelerator will be used.
   - [] Industrial Radiography
   - [] Radioisotope Production
   - [] Well Logging
   - [] Inspection
   - [] Research
   - [] Ion Implantation
   - [] Irradiation
   - [] Other (describe) ________________
10. Estimate maximum beam on time in one hour, maximum field size, and estimated workload per week.

11. Attach layout drawing of the facility or location of use (if accelerator is not in a housed facility.) Indicate location of each of these components listed below:
   - The Accelerator(s)
   - Control Panel / Operating Console(s)
   - Independent Radiation Monitor
   - Scram Buttons
   - Interlocks
   - Beam Stop System (if applicable)
   - Warning Devices (lights, signs, klaxons, etc.)
   - Indicate function and type of occupancy of all areas above, below and adjacent to the accelerator room.

12. Describe or attach a layout of the utilization loop, if used.

13. List radiation survey & monitoring equipment used (Make & Model):

14. Activation Products
   - Is airborne radioactivity anticipated, or observed? If so, describe discharge pathway and monitoring equipment. Is activation production expected in cooling systems?
   - Is activation of accelerator components or other structures anticipated or observed? If so, please describe.

15. Describe the interlock system, function and its operations.

16. Describe the beam stop system (if applicable) Retractable? Restrictions?

17. Describe the Warning devices, lights, signs, klaxons, etc.

18. Describe the collimation of the system.
19. **Access Control**  
Failsafe Door interlock switches present. ☐ Yes ☐ No  
Can the door be manually opened from inside the accelerator vault? ☐ Yes ☐ No

20. **Access Control**: Describe viewing and communications system and any provision for backup:

| 21. Provide a shielding design and calculations for new or reinstalled equipment. |
| 22. Provide a copy of Radiation Safety Survey that validates adequacy of the shielding. Report should compare calculated values with actual measurements. |

| 23. Describe the preventative maintenance program and the maintenance log process. | |

| 24. Name and phone number of administrator overseeing and supervising the accelerator facility. | 25. Provide the name of the repair/service organization: (indicate if handled in house). |

| 26. Confirm copies of procedures, directives or guidelines relating to operator safety and emergencies have been provided to accelerator operating and service personnel as required in 25 PA §§228.11a(b) and 228.35. Provide a list of these with the application. |
| 27. How are events or other departures from normal use reported and reviewed? Describe policies or guidelines followed at your facility. |

| 28. Describe initial training and continuing education program for accelerator operators. Indicate nature of training and how frequently it is offered. |

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**End of Part II**

Return these forms and fees with all attachments to:

PA Department of Environmental Protection  
Bureau of Radiation Protection  
Division of Radiation Control  
P.O. Box 8469  
Harrisburg, PA 17105-8469