

COMPLIANCE AND ENFORCEMENT POLICY

**Technical Guidance Number 291-4100-001
Bureau of Radiation Protection**



**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection**

For more information, visit DEP's website at
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DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Radiation Protection

DOCUMENT NUMBER: 291-4100-001

TITLE: Compliance and Enforcement Policy

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AUTHORITY: The Bureau's regulatory responsibility is authorized by the Radiation Protection Act, act of July 10, 1984 (P.L. 688, No. 147) (35 P.S. §§7110.101-7110.703); the Radon Certification Act, act of July 9, 1987 (P.L. 238, No. 43) (63 P.S. §§2001-2014); and the Low-Level Radioactive Waste Disposal Act, act of February 9, 1988 (P.L. 31, No. 12), (35 P.S. §§7130.101-7130.905).

The Radiation Protection Act applies to any person who owns, possesses, uses, disposes of, operates or maintains radioactive materials, radiation-producing machines such as x-ray machines, radon measurement devices, or performs radon mitigation, or operates a low-level radioactive waste site. The Act also provides for inspections, investigations, enforcement responsibilities, enforcement actions and civil and criminal penalties.

The Radon Certification Act provides for the certification of persons who perform radon testing, laboratory analysis and radon remediation and mitigation. The purpose of the act is to protect property owners from unqualified or unscrupulous individuals, consultants, and firms.

The Low-Level Radioactive Waste (LLRW) Disposal Act provides for the disposal of LLRW, the siting of a LLRW disposal facility, licensing of operators of the facility, and the permitting of generators, brokers and carriers for access to a regional LLRW disposal facility.

These acts authorize the Department to implement the acts and the regulations promulgated pursuant to the acts.

POLICY: The Bureau of Radiation Protection will follow the guidelines contained in this document for the purpose of obtaining compliance with, and enforcing, the regulations which it administers.

PURPOSE: The purpose of this document is to create Bureau-wide standard procedures for encouraging compliance with, and enforcing the regulations which the Bureau of Radiation Protection has the authority to administer.

APPLICABILITY: This policy applies to the Bureau of Radiation Protection staff involved in the implementation and enforcement of regulations administered by the Bureau. This policy is not intended to apply to individual situations for which application would not be appropriate. Decisions to deviate from

this policy may be made on a case-by-case basis at the discretion of the appropriate personnel.

DISCLAIMER:

The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP to give the rules in these policies that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

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DEFINITIONS:

Definitions for this policy can be found in the Radiation Protection Act, act of July 10, 1984 (P.L. 688, No. 147) (35 P.S. §§7110.101-7110.703); the Radon Certification Act, act of July 9, 1987 (P.L. 238, No. 43) (63 P.S. §§2001-2014); the Low-Level Radioactive Waste Disposal Act, act of February 9, 1988 (P.L. 31, No. 12), (35 P.S. §§7130.101-7130.905); and the PA Code, Title 25, Article V.

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PROCEDURES:

I. Introduction

The overall goal of the Bureau of Radiation Protection (“Bureau”) is to protect the health, safety, and welfare of the citizens of the Commonwealth of Pennsylvania from unnecessary radiation exposure from radiation sources, radon, and low-level radioactive waste. Obtaining compliance of the regulated community with applicable environmental laws and regulations is the Bureau’s main tool in achieving its goal.

Historically, the Bureau has worked with the regulated community in a cooperative and constructive manner to encourage and achieve compliance. Its philosophy has always been to use formal enforcement actions only as a last resort when reasonable, good faith efforts to facilitate compliance have failed. The current philosophy of the Bureau remains one of focusing its efforts on cooperating with the regulated community to achieve compliance rather than relying on rigorous legal enforcement.

The “Compliance Policy” section of this document discusses the ways in which the Bureau attempts to obtain compliance without resorting to legal enforcement. Most of the instances of regulatory violations are resolved without formal enforcement actions. The “Civil Enforcement Policy” section of this document discusses the policy applied by the Bureau only in the relatively few cases when all reasonable attempts to work in cooperation with the violator to obtain compliance have failed.

II. Inspections

A. Legal Authority

The Department’s employees and agents may conduct inspections of the records and facilities of registrants and licensees of radiation sources, persons certified to provide radon-related services, the operator of a regional LLRW disposal facility, and generators, brokers and carriers of LLRW.

1. Radiation Protection Act

Pursuant to **Section 305(a) of the Radiation Protection Act**, the Department or its duly authorized representative shall have the power to enter at all reasonable times with sufficient probable cause upon any public or private property, building, premise or place, for the purposes of determining compliance with this act, any license condition or any rule, regulation or order issued under this act. In the conduct of an investigation, the Department or its duly authorized representatives shall have the authority to conduct tests, inspections or examinations of any radiation source, or of any book, record, document or other physical evidence relating to the use of a radiation source.

When access to a site is refused, a Department representative may apply for a search warrant, pursuant to Section 305(b) of the Radiation Protection Act. It is sufficient probable cause to obtain a search warrant if the Department shows that the inspection is pursuant to a general administrative plan (for example, 25 Pa.

Code Chapter §215.12(c), discussed below); it has reason to believe that a violation of the act has occurred; or the Department has been refused access to a radiation source or a document or property related to a radiation source.

Under 25 Pa. Code Section 215.12(c), the Department or its duly authorized representatives may conduct inspections of the facilities of registrants of radiation-producing machines and licensees of radioactive material as set forth by the Department.

The Department or its duly authorized representatives may conduct additional follow-up inspections if violations of the act or regulations promulgated thereunder were noted at the time of the original inspection (25 Pa. Code Section 215.12(d)). Additional follow-up inspections may be performed if a person presents information, or circumstances arise which give the Department reason to believe that the health or safety of a person is threatened or that the act or radiological health regulations are being violated.

2. **Radon Certification Act**

Pursuant to **Section 12 of the Radon Certification Act**, the Department is authorized to conduct radon inspections in accordance with Section 305 of the Radiation Protection Act, including the search warrant provisions of that section.

Radon inspections are subject to the inspection provisions of 25 Pa. Code Chapter 220 (relating to notices, instructions and reports to workers; inspections) and 25 Pa. Code Chapter 240 (relating to radon certification). Under Section 240.401 of the regulations, the Department and its agents and employees will:

- a. At all reasonable times, have access to and require the production of books and papers, documents and physical evidence pertinent to a matter under investigation or inspection related to radon testing, mitigation of radon contamination or radon laboratory analysis.
- b. At all reasonable times, enter a building, property, premises or place of a person who conducts radon-related activities for the purpose of making an investigation or inspection necessary to ascertain the compliance or noncompliance with the Radon Certification Act and Chapter 240.

Additional regulatory requirements for the conduct of radon certification inspections are set forth in 25 Pa. Code Section 240.401(b), (c), and (d).

3. **Low-Level Radioactive Waste Disposal Act**

Pursuant to **Section 502(a) of the Low-Level Radioactive Waste Disposal Act**, the Department or its duly authorized representatives shall have the power to enter each and every facility at any time for the purpose of inspection and the power to enter at any time upon any public or private property, building, premises or place, for the purpose of determining compliance with this act, any permit or license

conditions or regulations or orders issued under this act. In the conduct of any investigation, the Department or its duly authorized representatives shall have the authority to conduct tests and inspections and examine any book, record, document, or other evidence related to the generation, management, transportation or disposal of low-level waste.

4. Memorandum of Understanding (MOU)

The Commonwealth reserves the right to enter into a Memorandum of Understanding with another governmental agency in order to share certain regulatory responsibilities and eliminate duplicity of effort. MOUs set forth mutually agreeable principles of cooperation in areas subject to the jurisdiction of one or both of the signing parties.

The Commonwealth and the Nuclear Regulatory Commission (NRC) entered into an MOU on November 4, 1986, allowing the development of detailed radiation safety subagreements in areas of mutual concern including transportation regulations, regulation of a low-level waste disposal site, low-level waste packaging and shipping inspections, confirmatory environmental monitoring, and emergency information exchange.

Subagreements under this MOU may provide for activities to be performed by either party under mutually acceptable guidelines and criteria which assure that the needs of both agencies are met.

A copy of the Commonwealth/NRC MOU, including the implementing procedures, is included in Appendix A.

B. On-site Inspections

The Bureau's Desk Manual defines the different types of on-site inspections - e.g. Routine/Complete Inspection, Full Compliance Evaluation, partial, follow-up, etc. - and identifies the activities/facilities where each type of inspection should be done. The vast majority of these inspections relate to radioactive materials and x-ray source users. The Desk Manual also provides Department personnel guidance on how to prepare for an inspection and how to conduct an inspection, and it defines the frequency of inspections for each activity/regulated facility that is inspected by the program. Inspectors shall be responsible for familiarizing themselves with and following the operating health and safety restrictions in place at the inspection site.

Training for all staff involved in the determination and resolution of violations is defined in the Bureau Desk Manual. This Desk Manual should be audited for effectiveness biennially.

The results of on-site inspections will follow the Department standard requiring the updating of a data system (e.g., eFACTS) for recording all violations within 10 working days of the completion of the inspection and/or the mailing of the Notice of Violation. Furthermore, the Bureau will monitor and track all Department-determined violations in a data system (e.g., eFACTS) until all of the violations are closed. If the result cannot be

determined at the time of inspection, the determination of the violation and the completion of the inspection report should be done within 14 calendar days after receiving any necessary further information, and the data system (e.g., eFACTS) should be updated as well.

The Bureau does **NOT** follow the Department standard requiring that all violations be documented in writing in an inspection report on the date of the inspection and presented to the facility before ending the inspection. Bureau procedures require supervisory review and signature of all written inspection reports.

In addition to an on-site inspection, there is an Administrative/File Review inspection. This is not an on-site inspection, but it is important for the financial sustainability of the Program. It is typically used by central office to establish an inspection type for issuance of a Notice of Violation for non-payment of licensing/registration/certification fees and associated violations. It is needed for an enforcement action to be initiated.

C. Denial of Access or Hindrance of Agent or Employee of the Department during an Inspection

1. Search Warrants

If an inspector is denied access to any building or record during an inspection, a search warrant may be obtained.

During an inspection or investigation for which a search warrant has been obtained, it is suggested strongly that additional law enforcement or Bureau staff accompany the inspector in order to conduct the required activity as quickly and safely as possible.

a. Under Section 305(b) of the Radiation Protection Act (also applicable to Radon activities), an agent or employee of the Department may apply to an issuing authority for a search warrant for the purposes of testing, inspecting, or examining any radiation source or any public or private property, building, premises, place, book, record or other physical evidence related to the use of radiation sources. A warrant shall be issued only upon a showing of probable cause. It shall be sufficient probable cause to show any the following:

- (1) The test, inspection or examination is conducted pursuant to a general administrative plan to determine compliance with this act.
- (2) The agent or employee of the Department has reason to believe that a violation of this act has occurred or may occur.
- (3) The agent or employee of the Department has been refused access to the radiation source, property, building, premises, place, book, record, document or other physical evidence relating to the use of the radiation source or the agent or employee has been prevented from conducting tests, inspections or examinations.

- b. Under Section 502(c) of the Low-level Radioactive Waste Disposal Act, an agent or employee of the Department may apply to an issuing authority for a search warrant for the purposes of testing, inspecting, or examining any radioactive material or any public or private property, building, premises, place, book, record or other evidence relating to the generation, management, transport or disposal of low-level radioactive waste. It shall be sufficient probable cause for issuance of a search warrant to show any of the following:
- (1) The test, inspection or examination is pursuant to a general administrative plan to determine compliance with this act.
 - (2) The agent, employee or inspector has reason to believe that a violation of this act has occurred or may occur.
 - (3) The agent, employee or inspector has been refused access to the low-level waste property, building, premises, place, book, record, document or other evidence related to the generation, management, transport or disposal of low-level waste, or the agent or employee has been prevented from conducting tests, inspections or examinations to determine compliance with this act.
 - (4) The host municipality or host county inspector has made a written complaint to the Department.
 - (5) A landowner has experienced radioactive contamination within three miles of the boundary of the regional facility and the landowner has notified the Department pursuant to Section 319 of the act.

The Application for Search Warrant and Affidavit may be obtained from the Director, Bureau of Investigations of the Department's Office of Chief Counsel, 9th Floor, RCSOB, Harrisburg, PA 17105-8464, 717-787-0453.

2. Civil Penalties

The recommended minimum penalty for hindrance, obstruction or delay of an agent or employee of the Department during the conduct of an inspection or investigation is \$2,500. For more information see the Bureau of Radiation Protection Civil Penalty Assessment Procedure, section VI (Appendix B) and the Civil Penalty Assessment Worksheet (Appendix C).

III. Compliance Policy

Note: If a violation is observed that could seriously affect the health and safety of workers, the public, or contaminate the environment, the Department may issue an order immediately, without taking the usual intermediate steps, such as issuing a Summary of Inspection Findings (discussed in this part) or a Notice of Violation (discussed in Part IV below).

The Program may establish an alternate timeframe, if necessary and approved by the Regional Director and Bureau Director. All violations, and the bases for the violations, should be clearly and concisely identified on the inspection report. Alternate timeframes should be reported to the Secretary in the Weekly Report.

A. Division of Radiation Control

The Division of Radiation Control administers licensing and registration programs that are well established. The regulated community, which consists of the users of radiation producing machines and radioactive materials, has sufficient familiarity with the regulations as well as the technical capacity to achieve compliance without extensive education and assistance. The Bureau provides assistance and guidance on an individual basis as needed.

The compliance strategy of the Division of Radiation Control on-site inspection may be summarized as follows:

1. All fees paid and up to date.
2. Upon completion of an onsite inspection, the inspector shall offer to discuss the inspection findings with the party responsible for radiation protection and senior management. If these parties are not available, the inspector discusses the findings with other appropriate personnel. The inspector does not provide written inspection findings at the time of inspection.
3. If the inspector finds a minor violation that can be remedied readily at the time of the inspection, he gives the appropriate party an opportunity to correct it and logs it in the inspection notes, but does not cite the party for the violation unless the party has a history of violations, or circumstances indicate the violation is willful.
4. Under appropriate circumstances, the inspector may assist in the correction of a violation at the time of the inspection.
5. The inspectors attempt to establish a rapport with the regulated community and encourage members of the community to contact the Bureau for assistance in solving technical problems.
6. If an inspector finds a violation that cannot be easily remedied at the time of the inspection, a letter of non-compliance is sent to the facility. A letter of non-compliance may also contain suggestions for possible ways to correct the violation that would be acceptable to the Department. The letter lists the violations and requests that the Bureau be notified within 30 calendar days from the date of the inspection of the actions taken to correct the violations. It advises that unless the violation has been resolved within the 30-calendar-day period following inspection, or the Regional Director and Bureau Director agree that an extended timeframe for issuing the Notice of Violation is acceptable in the specific case, an NOV will be issued. Case-specific time extensions and waivers such as this should be reported to the Secretary in the Weekly Report. However,

where violations involve issues of health or safety, or past non-compliance indicates an uncooperative attitude, a Notice of Violation may be sent in place of the letter of non-compliance. NOV's that are issued for violations that were resolved within a 30-calendar-day timeframe should be approved by the Regional Director or Bureau Director, and their issuance should be reported to the Secretary in the Weekly Report. In more serious circumstances, the inspector should discuss issuance of an immediate Administrative Order with the inspector's supervisor and counsel. Whenever a time period for response is associated with compliance correspondence, the action will be reviewed by the supervisor of the individual responsible for levying the action.

7. If at any time during the course of an inspection there are conditions that present an imminent radiological threat to health or safety requiring immediate protective action, an inspector may issue a Field Order to cease and desist operations or cause other appropriate action to be taken. Where practical, the inspector shall attempt to contact his supervisor, manager or director for consultation prior to issuing the order. The inspector's supervisor will then apprise BRP regional and central office management of the action being taken.
8. A letter of non-compliance may also contain on a separate attachment any suggestions offered for consideration to enhance the radiation safety program. These suggestions are clearly identified as for informational purposes only.

The compliance strategy of the Division of Radiation Control Central Office (CO) fee related Administrative/File Review Inspection may be summarized as follows:

Ten (10) calendar days after the expiration of a registration or license a Fee Delinquent Letter (FDL) is mailed to the delinquent facility in question. The FDL requests the facility remit all unpaid fees within 10 calendar days from the date on the FDL. The FDL is equivalent to a courtesy late notice and may not immediately constitute a violation of the regulations. Payment in full of unpaid fees must be received within 10 calendar days from the date on the FDL.

If payment is not received, an NOV is mailed via USPS Certified mail 15 calendar days from the date on the FDL. The NOV demands payment in full of unpaid fees within 15 business days from the date of the NOV.

The results of administrative/file review inspections will follow the Department standard requiring the updating of a data system (e.g., eFACTS) for recording all violations within 10 working days of the completion of the inspection and the mailing of the NOV. Furthermore, the Bureau will monitor and track all Department-determined violations in a data system (e.g., eFACTS) until all of the violations are closed.

Thirty (30) days after the issuance of an NOV when full payment has not been received, CO requests regional staff to check the facility in question to verify its existence. If the facility still exists, the collection of fees is referred to the Office of Attorney General, and the data system (e.g., eFACTS) is updated.

B. Radon Division

The Radon Division consists of a Certification Section and a Radon Monitoring Section.

The two general types of non-compliance that are administered or issued by the Certification Section are cases in which certified persons are not in compliance with certain conditions of certification, such as reporting requirements, and cases in which persons are engaged in radon-related activities while not certified to do so. The Certification Section sends a letter to the person advising of the nature of the violation and requesting a response within **10 calendar days for cases in which the person is engaging in radon-related activities while not certified to do so, and within 20 calendar days for other types of noncompliance.**

If the violator is not certified to perform radon-related services, the letter advises that an application for certification may be filed, and an application is enclosed.

The Radon Monitoring Section inspects radon laboratories, testers, mitigators, and mitigation systems. At the conclusion of the inspection the findings are discussed with the certified individual. However, for mitigation system inspections, the inspector is unable to discuss the findings at the time of inspection with the person who installed the system because inspections are performed at the location of the installed mitigation system, rather than the premises of the person who installed the system.

If an inspector finds a violation that cannot be easily remedied at the time of inspection, a Summary of Inspection Findings is sent to the facility. The Summary lists the violations and requests that the Bureau be notified within **20** calendar days from the date of the letter of the actions taken to correct the violations. It advises that if a satisfactory response is not received within **20** days, an NOV will be sent. However, where violations involve issues of health or safety, or past non-compliance indicates an uncooperative attitude, an NOV may be sent concurrently with the Inspection Findings. In very serious circumstances, the inspector should discuss issuance of an immediate Administrative Order with his supervisor and counsel. The Summary of Inspection Findings advises that unless the violation has been resolved within the 20-calendar-day period following notification, or the Regional Director and Bureau Director agree that an extended timeframe for issuing the NOV is acceptable in the specific case, an NOV will be issued. Case-specific time extensions and waivers such as this should be reported to the Secretary in the Weekly Report.

More information on Radon Division compliance can be found in the Pennsylvania Radon Certification Policy, document identification number 294-2309-001.

C. Radioactive Waste Section

A compliance policy has not yet been developed for this program because the regional disposal facility has not yet been licensed.

D. Nuclear Safety Section

A compliance policy is not needed for this program because the NRC has exclusive jurisdiction for enforcing compliance with NRC license conditions and NRC regulations.

E. Decommissioning and Environmental Surveillance Division

The Decommissioning and Environmental Surveillance Division consists of the Decommissioning Section and the Environmental Surveillance Section.

The Decommissioning Section Compliance and Enforcement Policy parallels that of Radiation Control, and inspections are performed by Regional Office staff. There is currently only one facility in the Commonwealth that has a Pennsylvania Decommissioning License. This facility (Safety Light) is currently under an EPA waste removal order and is scheduled to be added to the National Priorities List (NPL) this year. As such, EPA will have the lead on any compliance and enforcement issues.

The Decommissioning Compliance and Enforcement Policy will support Pennsylvania activities becoming a Nuclear Regulatory Commission (NRC) Agreement State. Pennsylvania will become responsible for several complex decommissioning sites as well as many other routine license terminations and decommissioning licensees upon attaining full NRC Agreement State status.

The Bureau of Radiation Protection has incorporated NRC's regulations regarding decommissioning (10 CFR) into Pa. Code Title 25. Furthermore, it is anticipated that the NRC's Consolidated Decommissioning Guidance and Compliance and Enforcement Policy pertaining to Decommissioning will be adopted and incorporated into a Decommissioning Desk Manual that will be submitted to the NRC as part of the Agreement State approval process.

A compliance policy is not needed for the Environmental Surveillance Program as no enforcement actions are taken as result of Environmental Surveillance activities.

IV. Civil Enforcement Policy

Historically, the most common reason for initiating a civil enforcement action is failure of the permittee (registrant, licensee, certified person) to remit required fees.

The issuance of an NOV may be waived by the Regional Director and Bureau Director in cases where neither the regulated entity nor any person or entity legally related to the regulated entity has been issued an NOV or any enforcement action within the past three (3) years and the regulated entity is working towards correcting the current non-compliance in a timely manner. Case-specific time extensions to this standard and waivers should be reported to the Secretary in the Weekly Report.

A. Notice of Violation (NOV)

An NOV is a document that notifies a person of the Department's view that violations of the Department's regulations have taken place and, depending on the nature of the

violation, requests the person to advise the Department as to what action has been taken or will be taken to correct the violation. An NOV is not an order and, therefore, is not appealable.

The content of an NOV is virtually the same as that of a Summary of Findings and Letter of Non-Compliance (see "Compliance Policy", above). It is issued if the Department has received either no response or an unsatisfactory response to a Summary of Findings or other preliminary letter (such as that sent by the Certification Section of the Radon Division to a person engaged in radon activities without certification). NOV's should be issued concurrently with a Summary of Findings in cases where a serious, willful or recurrent violation has been found.

For inspections conducted under the State/NRC Memorandum of Understanding (Appendix A), an NOV will be issued by the NRC Regional Office after review of the Bureau inspection report and supporting information.

An NOV may be sent by Bureau staff without consultation with Department counsel. However, if counsel had previously been involved in the matter, or if the facts or issues of the case are appropriate for attorney review, counsel shall be consulted.

1. Content of the Notice of Violation

The NOV must be worded so that it requests rather than requires action to correct a violation. It may not contain directives such as "shall", or "must". If it contains such directives, it could be construed as an appealable order. Issuance of an order at this stage of the enforcement process may be premature; therefore, use of proper language in the NOV is important.

The NOV shall generally contain the following information:

- a. Facility identification (including specific registration number or license number);
- b. Date of the violation detection;
- c. Name of the Department inspector who detected the violation;
- d. A description of the activity which led to the detection of the violation;
- e. A description of the violation;
- f. The law, regulation, license or certification condition violated;
- g. If appropriate, a specific date by which the person is requested to report to the Department the corrective actions taken to achieve compliance with the applicable statutes and regulations.

The NOV shall not include a civil penalty assessment.

An NOV may also contain reference to possible ways to correct the violation that would be acceptable to the Department. It may also contain a separate attachment for suggestions for the improvement in the effectiveness or efficiency of the radiation protection program. These suggestions are clearly identified as recommendations as distinguished from violations. The Department does not request an acknowledgement or response concerning these recommendations.

Division of Radiation Control: An example of a typical NOV used by the Division of Radiation Control, Regional Liaison (Registration) Section for inspection findings and an example of a Licensing Section NOV can be found in the Bureau Desk Manual. The NOV generally requests the person to respond to the Department within 14 calendar days of the date of the NOV.

Radon Division: An example of a typical NOV used by the Radon Division for inspection findings can be found in the Bureau Desk Manual. The NOV generally requests the person to promptly correct the violations and to contact the Department within 10 calendar days from the date of the NOV to advise the Department of the progress in making the corrections.

An example of a typical NOV used by the Certification Section of the Radon Division when a person is engaged in radon-related activities while not certified to do so can be found in the Bureau Desk Manual.

2. Response to an NOV

When a person responds in writing to an NOV, a letter shall be sent to the violator acknowledging receipt. At that time, the Department shall indicate whether it agrees or disagrees with the response, including the proposed means and timeframes for achieving compliance. The NOV should be closed out in a data system (e.g., eFACTS) when the violations identified in the NOV have been resolved, and the violator should be notified in writing that the Department considers the violation(s) resolved.

Compliance deadlines proposed by a person in response to an NOV are not legally enforceable. In many instances, the Department may wish to make these or other deadlines enforceable by incorporating compliance obligations into a Consent Order and Agreement (i.e., a consensual order, signed by both the person and the Department).

Failure of a violator to respond in an acceptable manner to an NOV may result in the issuance of an order requiring correction of the violations. (See "Legal Enforcement" below), and/or a civil penalty assessment.

3. Failure to Correct Violations

If the violator does not correct the violations in a timely manner, the Bureau, at its discretion, may attempt to obtain compliance through informal contacts with the

violator. If it appears that the violator will not voluntarily correct the violations in a timely manner, the Bureau should consult with the Department counsel concerning appropriate enforcement steps (see “Legal Enforcement” below).

B. Legal Enforcement

Section 309 of the Radiation Protection Act and Section 505 of the Low-Level Radioactive Waste Disposal Act provide the Department with powers of enforcement. Departmental orders and civil penalty assessments are the most commonly used means of enforcement. Orders and civil penalty assessments may be used independently of each other or concurrently to enforce radiation protection statutes and regulations. Civil penalty assessments may be issued regardless of whether an order has been or will be issued.

All unilateral civil penalty assessments and orders are appealable to the Environmental Hearing Board (“EHB”). At a hearing before the EHB, the Department will have the burden of proving that it was factually and legally justified in taking the action. The violator’s counsel may cross-examine Department witnesses and present evidence refuting the Department’s case. The EHB may affirm, modify or overrule the Department’s action.

The particular strategy used in a case depends on the circumstances of that case, as well as on the discretion of the Department. For cases that require legal enforcement after issuance of an NOV, Department counsel must be consulted. Counsel will receive and approve all enforcement actions. The following is an overview of various legal enforcement strategies available.

The Bureau of Radiation Protection’s Civil Penalty Assessment Procedure (Appendix B) sets forth the procedure for issuing notices of civil penalties. The procedure begins with a Notice of Proposed Civil Penalty Assessment, which includes an invitation to a conference. This process, which may also be accomplished informally via a telephone conference, is an opportunity for the parties to discuss a mutually acceptable resolution before the Department takes unilateral enforcement action. Depending on whether a conference is held and the outcome of it, either a Consent Order and Assessment of Civil Penalty Agreement or an Assessment of Civil Penalty will be issued next. In appropriate circumstances, an Assessment of Civil Penalty may be issued without the prior issuance of a proposed assessment.

Once final, an Assessment of Civil Penalty is legally enforceable as a debt, which is collectable under Pennsylvania’s debt collection laws. In addition, the amount of the debt, together with interest and costs, becomes a lien in favor of the Commonwealth upon the real and personal property of the debtor when the amount of the debt is recorded by the prothonotary of the county where the property is located.

An order to correct the violation(s) may be issued. This order may be issued before, after, or concurrently with an Assessment of Civil Penalty. If the order is not complied with, a civil penalty may be assessed for failure to comply with an order (as well as for the underlying violation(s)). Under the Bureau of Radiation Protection’s Civil Penalty Assessment Procedure, the recommended minimum penalty for failure to comply with

the order is \$1,000. In addition to assessing a civil penalty, the Department may petition the Commonwealth Court for a court order requiring compliance with the Department's order. Non-compliance with a court order may result in fines, imprisonment, or both for contempt of court. Where a violation of an enforceable document occurs, the Department may allow settlement negotiations to continue for 60 calendar days before petitioning a court to resolve the violation unless the Regional Director or Bureau Director recommends and the Secretary agrees that an extended timeframe for negotiations is acceptable while the violator is not complying with the terms of the enforceable document.

An order to cease and desist unlawful activities may be issued. As with an order to correct violations, this order may be issued before, after, or concurrently with an Assessment of Civil Penalty. (Under the Civil Penalty Assessment Procedure, the recommended minimum civil penalty for issuance of a cease and desist order is \$1,000.)

The Radon Division of the Bureau may issue orders of suspension of certification and decertification, pursuant to the radon certification regulations at 25 Pa. Code Sections 240.203(b) and 240.403(a), as well as orders to correct improperly installed mitigation systems, to provide the Department with records, to refrain from improper advertising, and to correct other issues of non-compliance.

Orders must contain the following:

1. Recitation of the legal authority of the Department;
2. Name and residence, and business name and address of the violator;
3. Findings of the Department;
4. Regulation(s) and statutory provision(s) violated;
5. Legal authority for issuance of order;
6. Action ordered and date by which it is to be taken;
7. Appealability statement (boilerplate).

Orders must be reviewed prior to issuance by regional counsel, signed by the Regional Program Manager or Bureau Director, and sent to the violator by certified mail, return receipt. Copies of signed orders are forwarded to the Bureau's Central Office as well as to the appropriate regional counsel.

As with Assessments of Civil Penalties, orders may be appealed to the EHB. An appeal does not suspend the violator's duty to comply with the order, unless the violator also requests and justifies issuance of a supersedeas from EHB.

Other enforcement tools authorized by the Radiation Protection Act and the Low-Level Radioactive Waste Disposal Act are the filing of a suit for an injunction; modification or revocation of registrations, licenses or permits; impounding of a radiation source or low-

level radioactive waste; and other actions by the Department as are necessary to abate a public nuisance. As with all other enforcement measures, Department counsel must be consulted on the use of these methods.

Violations that take more than 180 calendar days to resolve should be addressed in an enforceable document unless the Regional Director and Bureau Director agree that an enforceable document is not warranted in the specific case. Negotiations for the enforceable document, including the appropriate penalty assessment, should be finalized within 180 calendar days after the date that the Department notified the violator/responsible person of the violations, unless the Regional Director and Bureau Director agree that an extended time frame is acceptable in the specific case.

Violations that take less than 180 calendar days to resolve may be incorporated into an enforceable document, as appropriate. Case-specific extensions to this standard should be reported to the Secretary in the Weekly Report.

For all violations that are addressed via an enforceable document, all programs should incorporate the Department standard that the negotiations for the enforceable document, including the appropriate penalty assessment, be finalized within 180 calendar days after the date that the Department notified the violator/responsible person of the violations, unless the Regional Director, Bureau Director, or District Mining Manager agrees that an extended time frame is acceptable in the specific case. Otherwise, the Department should take the applicable enforcement action that imposes the obligations necessary to resolve the violations. Negotiations can be re-established once the violator is under an enforceable schedule. Case-specific extensions to this standard should be reported to the Secretary in the Weekly Report.

All material obligations, corrective actions, or milestones for the resolution of a violation that are contained in an enforceable document should be monitored by Department staff and tracked in a data system (default is eFACTS), and be updated within 10 working days of compliance with each material obligation, corrective action, or milestone. EFACTS should be updated within 10 working days of final compliance with the enforceable document.

V. Criminal Actions

The Department may refer to the Office of Attorney General, Environmental Crimes Section, any case in which it believes that a person has committed a crime under the Radiation Protection Act, the Radon Certification Act, or the Low-Level Radioactive Waste Disposal Act. The Department may prosecute summary violations without referral, but must refer more serious violations to the Office of Attorney General.

A. Categories of Crimes

1. Summary Offense

Under Section 308(a) of the Radiation Protection Act, any person, other than a municipal official exercising his official duties, who violates any provision of the Radiation Protection Act or any regulation or order issued pursuant to the act

commits a summary offense and shall, upon conviction, be sentenced to pay a fine of not less than \$100 and not more than \$1,000 for each separate offense. A person who defaults on payment of the fine shall be imprisoned for a term of not more than 30 days. All summary proceedings under this act may be brought before any district justice in the county where the offense was committed.

Under Section 14 of the Radon Certification Act, a person who violates Section 7 of the act (requiring persons who provide testing or mitigation services to disclose to the Department, within 45 days of the date the services are provided, the address or location of the building, the name of the owner of the building where services were provided, and the results of all tests performed) commits a summary offense.

Under Section 504(a) of the Low-level Radioactive Waste Disposal Act, any person who violates the act or any regulation or order issued pursuant to the act commits a summary offense and shall, upon conviction, be sentenced to pay a fine of not less than \$100 and not more than \$1,000 for each separate offense. A person who defaults on payment shall be imprisoned for a term of not more than 90 days. All summary proceedings under this act may be brought before any district justice in the county where the offense was committed.

Summary prosecutions offer some advantages over Assessment of Civil Penalties. Summaries are quick, are useful where collection of civil penalties would prove difficult, and can result in imprisonment for recalcitrant violators.

2. Misdemeanor

Under Section 308(b) of the Radiation Protection Act, a person other than a municipal official exercising his official duties, who violates any provision of the act or any regulation or order issued pursuant to the act, within two years after having been convicted of any summary offense under the act, commits a misdemeanor of the third degree and shall, upon conviction, be sentenced to pay a fine of not less than \$1,000, but not more than \$25,000, for each separate offense or imprisonment in the county jail of a period of not more than one year, or both.

Under Section 14 of the Radon Certification Act, a person who violates Section 6 of the act (requiring persons who provide radon-related services to be certified), or any regulation issued pursuant to Section 6, commits a misdemeanor of the third degree. Pursuant to the Pennsylvania Crimes Code, 18 Pa. C.S.A. Section 1104, a person who has been convicted of a misdemeanor of the third degree may be sentenced to imprisonment of not more than one year.

Under Section 504(b) of the Low-Level Radioactive Waste Disposal Act, any person who violates the act or any regulation or order issued pursuant to the act, within two years after having been convicted of any summary offense under the act, commits a misdemeanor of the third degree and shall, upon conviction, be sentenced to pay a fine of not less than \$1,000 and not more than \$25,000 for each separate offense or imprisonment in the county jail for not more than one year, or both.

3. Felony

Under Section 308(c) of the Radiation Protection Act and Section 504(c) of the Low-Level Radioactive Waste Disposal Act, any person who intentionally, knowingly or recklessly violates any provision of the acts, or any regulation or order of the Department or any condition of a permit or license, and whose acts or omissions cause or create the possibility of a public nuisance or bodily harm to any person, commits a felony of the second degree and shall, upon conviction, be sentenced to pay a fine of not less than \$2,500, but not more than \$100,000 per day for each violation, or to a term of imprisonment of not less than one year but not more than ten years, or both.

4. Separate Offense for Each Day

Under Section 308(d) of the Radiation Protection Act and Section 504(d) of the Low-Level Radioactive Waste Disposal Act, each day of continued violation of any provision of these acts or any regulation or order issued pursuant to these acts or (under the Low-Level Radioactive Waste Disposal Act) any term or condition of any permit or license, shall constitute a separate offense.

B. Referral to the Attorney General's Office

Regional counsel's advice should be sought early in the investigative phase of a suspected criminal violation, and prior to referral. Counsel can advise on the protocol for referring cases to the Environmental Crimes Section of the Attorney General's Office, including information pertaining to referral criteria, initiating referral, content of referral package, emergency referrals, actions following referrals, and notification by the Attorney General of action taken.

VI. Complaints, Allegations and Investigations

A. Complaints and Allegations

The Radiation Protection Program follows the Department's current Complaint Response Policy and associated Complaint Tracking System. This policy is used for all types of complaints and allegations, including, but not limited to complaints and allegations from members of the public against regulated or non-regulated entities. Complaints and allegations received by regional offices are processed by a regional service representative. Complaints and allegations received by Central Office are routed to the appropriate Division Chief or the Bureau Director if the severity and urgency warrants.

Members of the public or permit holders seeking to lodge a complaint or allegation against any DEP employee should be directed to contact the Pennsylvania Office of Inspector General. Any complaints and allegations sent to the Department are referred directly to the Pennsylvania Office of Inspector General or through the DEP Deputy Secretary for Administration.

B. Investigations

A complaint or allegation may lead to an investigation. Investigations are lead by management or supervisory personnel and are performed on a case-by-case basis. Historically investigations usually involve an unidentified radioactive source in an uncontrolled environment or a medical reportable event. In such cases, the Program, in conjunction with counsel, will conduct an extensive investigation into and a search for potentially responsible parties (PRP) for custody of the sources. Cases of *medical reportable events for radiation-producing machine therapy* are somewhat less involved and are investigated primarily by Program staff.

To clarify, inspections are generally routine and do not involve a complaint or allegation. There are inspections that are of non-routine nature resulting from an event or incident (i.e., NRC Augmented Inspection Team inspections, etc.). An investigation is initiated by a complaint, allegation or an incident. Furthermore, an investigation usually involves an inspection.

C. Violator/Responsible Person Not Known

Historically, the Program has investigated very few incidents where the violator or responsible person is not known. In cases where this does occur, the Program will assist in locating an acceptable disposal facility if radioactive material is involved.

VII. Compliance Assistance

A. Information

The Radiation Protection Program will from time to time distribute via its website and mailings information relevant to the regulated community.

B. Informal Meetings

The program will, as necessary, hold meetings where the regulated community can discuss regulations with key program personnel.

C. Regulation Interpretation and Resolution

In cases where a regulated entity or the regulated community as a whole raises an issue, in writing, involving interpretation of Radiation Protection regulations, the Program will hold an informal and internal panel of resolution. The opinion of this panel will be disseminated as prescribed in subsection A, above.

Approved for the Department:

Director
Bureau of Radiation Protection

Appendix A



Commonwealth of Pennsylvania
Office of the Governor
Harrisburg

The Governor

November 4, 1986

Nunzio J. Palladino, Chairman
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Chairman Palladino:

As requested, enclosed please find three signed copies of the Memorandum of Understanding between the Commonwealth of Pennsylvania and the U.S. Nuclear Regulatory Commission regarding methods of cooperation in areas of mutual interest involving nuclear safety. On behalf of Pennsylvania I would like to thank you for this opportunity.

Sincerely,

Dick Thornburgh
Governor

bcc: Honorable Nicholas DeBenedictis
Barry Hartman, Esquire
Harold Miller

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE
COMMONWEALTH OF PENNSYLVANIA
AND THE
U.S. NUCLEAR REGULATORY COMMISSION**

This Memorandum of Understanding between the Commonwealth of Pennsylvania (hereafter "Commonwealth") and the U.S. Nuclear Regulatory Commission (hereafter "NRC") expresses the desire of the parties to cooperate in the regulation of nuclear activities; it sets forth mutually agreeable principles of cooperation between the Commonwealth and NRC in areas subject to the jurisdiction of the Commonwealth or the NRC or both. This Memorandum is intended to provide the basis of subsequent detailed subagreements between the parties.

Close cooperation between the signatories will help assure that the goals and policies of the Commonwealth and Federal law will be carried out efficiently and expeditiously without diminishing the responsibilities or authorities of either party.

With the execution of the Memorandum, the Commonwealth and NRC agree to consult regularly and to cooperate in exploring and devising appropriate procedures to minimize duplication of effort to the extent permitted by Commonwealth and Federal law, to avoid delays in decision making, and to ensure the exchange of information that is needed to make the most effective use of the resources of the Commonwealth and the NRC in order to accomplish the purpose of both parties.

Principles of Cooperation

1. Toward these goals, the State and NRC agree to explore together the development of detailed subagreements in areas of mutual concern including, but not necessarily limited to, transportation regulation, at a low-level waste disposal site, low-level waste packaging and shipping inspections, confirmatory environmental monitoring and emergency information exchange.
2. Subagreements under this Memorandum may provide for activities to be performed by either party under mutually acceptable guidelines and criteria which assure that the needs of both are met. For activities performed by one party at the request of the other party under specific subagreements to this Memorandum, either party may explore means by which compensation can be made available to the other party or by which the costs may be shared by the parties.
3. NRC agrees to explore with the Commonwealth the possibility of sharing with the Commonwealth proprietary and other information in NRC's possession that is exempt from mandatory public disclosure.
4. Nothing in this Memorandum is intended to restrict or extend the constitutional or statutory authority of either NRC or the Commonwealth or to affect or vary the terms of a future agreement between the Commonwealth and the NRC under Section 274b. of the Atomic Energy Act of 1954, as amended.
5. The principal NRC contact under this Memorandum shall be the Director of the Office of State Programs. The principal Commonwealth contact shall be the Director of the Pennsylvania Bureau of Radiation Protection or his or her designee. Subagreements will name appropriate individuals, agencies or offices as contacts.

6. This Memorandum shall take effect upon signing by the Governor of the Commonwealth of Pennsylvania and the Chairman of the Nuclear Regulatory Commission, and may be terminated by either party upon 30 days written notice.

FOR THE COMMONWEALTH OF PENNSYLVANIA

Dick Thornburgh
Governor

Dated at Harrisburg, Pa.
This 4th day of November, 1986

FOR THE UNITED STATES NUCLEAR REGULATORY COMMISSION

Nunzio J. Palladino
Chairman

Dated at Washington, D.C.
This 7th day of November, 1986

**SUBAGREEMENT 1
PERTAINING TO LOW-LEVEL RADIOACTIVE WASTE PACKAGE AND
TRANSPORTATION INSPECTIONS
BETWEEN THE
COMMONWEALTH OF PENNSYLVANIA
AND THE
U.S. NUCLEAR REGULATORY COMMISSION**

This Subagreement is entered into under the provisions of the Memorandum of Understanding between the Commonwealth of Pennsylvania and the United States Nuclear Regulatory Commission effective November 4, 1986.

The Commonwealth of Pennsylvania, in fulfilling its obligations under the Low-Level Radioactive Waste Policy Amendments Act of 1985 contemplates that it will make periodic inspections of the areas of low-level radioactive waste packages and transport activities of generators located within its borders if shipments of such waste are destined for disposal at a low-level radioactive waste disposal facility.

The United States Nuclear Regulatory Commission (NRC or Commission) has the statutory responsibility to inspect its licensees to determine compliance with NRC requirements, including requirements pertaining to the shipment, packaging and transportation of low-level radioactive waste destined for disposal. In the exercise of this responsibility, the Commission regularly conducts a review of the waste packaging and transportation programs of its licensees including the licensees' procedures for quality assurance, packaging, marking, labeling and loading of vehicles. These program reviews usually have been found adequate to ensure licensee compliance with the Commission's regulations regarding low-level radioactive waste packaging and transportation without the need for Commission inspection of each individual shipment.

Under Section 274(i) of the Atomic Energy Act of 1954, as amended, the Commission in carrying out its licensing and regulatory responsibilities under the Act is authorized to enter into a Memorandum of Understanding (agreement) with any State to perform inspections or other functions on a cooperative basis as the Commission deems appropriate. While the Commission does not conduct on-site inspections of every low-level radioactive waste shipment of its licensees, it desires to foster the goals of the Low-Level Radioactive Waste Policy Amendments Act of 1985, the Commonwealth of Pennsylvania, and the Appalachian Compact.

Accordingly, this Subagreement between the Commonwealth of Pennsylvania and the NRC establishes mutually agreeable procedures whereby the Commonwealth may perform inspection functions for and on behalf of the Commission at certain NRC reactor and materials licensees' facilities which generate low-level radioactive waste.

It is hereby agreed between the Commission and the Commonwealth as follows:

1. The Commission hereby authorizes the Commonwealth to perform, for an on behalf of the Commission, the following functions with respect to low-level radioactive waste, as defined in Section 2(g) of the Low-Level Radioactive Waste Policy Amendments Act of 1985, in the possession of Commission licensees located within the Commonwealth.

- (a) Inspections to determine compliance with the Commission's rules and regulations regarding waste packages and transportation of low-level radioactive waste destined for disposal at a commercial low-level radioactive waste disposal site; and
- (b) Notification of Commission licensees and the Commission in writing of any findings disclosed by such inspections. All enforcement actions (such as Notices of Violations, Civil Penalties or Orders) pursuant to this Subagreement resulting from such inspection findings will be undertaken by the Commission.

The Commission agrees to utilize personnel knowledgeable in radiation safety, waste packaging requirements, and packaging and transportation regulations. The Commonwealth agrees to perform its functions under this Subagreement at no cost or expense to the NRC. NRC may provide training to employees of the Commonwealth at no expense to the Commonwealth (except travel and per diem). The Commission does not normally evaluate the Commonwealth's ability to perform such functions; however, prior to Commonwealth qualification of inspectors, Commonwealth management, accompanied by an NRC representative, will assess its inspectors preparedness to conduct independent inspections.

- 2. The authority to inspect NRC licensees pursuant to the preceding paragraph is limited to the licensee's low-level waste packages and low-level transportation activities. Specifically, this authority is limited to:

- (a) Review, for understanding, the licensee's written procedures;
- (b) Inspection of the licensee's written records; and
- (c) Inspection of completed packages and transportation activities.

The authority does not include assessment of the adequacy of the licensee's written procedures, plant equipment, quality control programs, training programs or staffing. Specific implementing procedures are attached hereto which may be modified, as required.

- 3. In taking any action authorized hereunder, the Commonwealth shall not undertake to amend or revoke Commission licenses. This Subagreement, however, shall not be construed to preclude the Commonwealth from exercising any authority lawfully available to it under its own laws.
- 4. Efforts will be made by both parties to avoid duplicative enforcement action against an NRC licensee for the same inspection finding. However, this is not meant to preclude appropriate complementary actions for the same inspection findings such as termination of a user permit by the Commonwealth and NRC enforcement action.
- 5. Nothing herein shall be deemed to authorize the Commonwealth to inspect or otherwise enter the premises of any licensee of the Commission which is a Federal instrumentality without the prior consent of the licensee.
- 6. Nothing herein shall be deemed to preclude or affect in any manner the authority of the Commission to perform any or all of the functions described herein.

7. Nothing herein is intended to restrict or expand the statutory authority of NRC or the Commonwealth or to affect or vary the terms of any agreement in effect under the authority of Section 274(b) of the Atomic Energy Act of 1954, as amended.
8. Nothing herein shall be deemed to permit the Commonwealth to impose packaging or transport standards beyond those continued in Federal regulations.
9. The principal NRC contacts under this Subagreement shall be the Emergency Preparedness and Radiological Protection Branch Chief for reactor licensees and the Nuclear Materials Safety and Safeguards Branch Chief or materials licensees, both of whom are located in the Division of Radiation Safety and Safeguards, Region I, NRC. The principal Commonwealth contact shall be the Chief, Division of Nuclear Safety, Pennsylvania Bureau of Radiation Protection.
10. This Subagreement shall become effective upon signing by the Secretary, Department of Environmental Resources, Commonwealth of Pennsylvania, and the Regional Administrator, Region I, Nuclear Regulatory Commission and shall remain in effect permanently unless terminated by either party on thirty days prior written notice.

Dated this 17th day of August 1987 at King of Prussia, PA.

FOR THE NUCLEAR REGULATORY COMMISSION

Regional Administrator

FOR THE COMMONWEALTH OF PENNSYLVANIA

Secretary, Department of Environmental Resources

Dated: September 11, 1987

**IMPLEMENTING PROCEDURES-SUBAGREEMENT I
PERTAINING TO LOW-LEVEL RADIOACTIVE WASTE PACKAGE
AND TRANSPORTATION INSPECTIONS
BETWEEN THE COMMONWEALTH OF PENNSYLVANIA AND THE NRC**

I. TRAINING

A. Pennsylvania staff attendance at NRC Sponsored Courses

1. Pennsylvania staff may attend NRC sponsored training courses when mutually agreed upon by Pennsylvania and NRC.
2. Attendance at any particular course will be scheduled on a space available basis.
3. Staff applying for attendance must fulfill any necessary course prerequisites.
4. Attendance will normally be limited to 1-2 individuals at any one particular course.
5. Pennsylvania will pay any transportation and per diem expenses except for courses offered in connection with the Agreement State Program where NRC pays for travel and per diem of State personnel selected to attend.

B. On-the-Job Training

1. On-the-job training will be provided to the Pennsylvania staff in the conduct of inspections to determine compliance with the requirements in 10 CFR Parts 20, 61 and 71.
2. The training accompaniments will normally be limited to NRC licensees located in the Commonwealth of Pennsylvania.
3. The training accompaniments will follow the protocol set out in Mr. Haynes' November 5, 1982 letter to Mr. Gerusky. Under the protocol, the activities of the individual accompanying the NRC inspector will be limited to observation and familiarization with plant activities and the NRC inspection process. The NRC inspector will be responsible for initiating action to correct any program deficiencies identified during the inspection through NRC's normal inspection and enforcement process.
4. Commonwealth of Pennsylvania staff accompanying the NRC inspector will normally be limited to two persons - the senior staff member responsible for the program and the cognizant inspector for the plant being inspected.
5. Emphasis will be placed on training two senior Pennsylvania staff who can learn this area quickly and who, in turn, can begin to train other Pennsylvania staff.

6. The training may also involve pre-inspection planning at the Regional Office or in the NRC resident inspection office prior to the inspection. The Commonwealth inspection staff is expected to have reviewed prior inspection reports, inspection findings and enforcement actions for the facility being inspected. It is also expected that the Commonwealth inspectors are thoroughly knowledgeable of the NRC inspection procedures and reference material cited in those procedures. These are important parts of preparing for the inspection.
7. The training accompaniments will be provided by a Region based inspector who routinely inspects waste packaging and transportation activities, not the resident inspector or TMI-2 inspection staff.
8. The contact for the training accompaniment inspections at reactors will be the Chief, Emergency Preparedness and Radiological Protection Branch, Division of Radiation Safety and Safeguards. The similar contact for materials inspections will be the Chief, Nuclear Materials Safety and Safeguards Branch, Division of Radiation Safety and Safeguards. If either of the above are not available the contact will be the Regional State Liaison Officer.

C. Initiation of Independent Inspections by Pennsylvania Staff

1. The Commonwealth will ensure that its inspectors are qualified in accordance with NRC inspection and Enforcement Manual Chapter 1245, or its equivalent, and will keep NRC informed of the Commonwealth inspectors that have been so qualified and certified. Prior to Commonwealth qualification of inspectors, Commonwealth management, accompanied by an NRC representative, will assess the performance of its inspectors during an inspection to determine their preparedness to conduct independent inspections. Following the accompaniment, the NRC representative will provide a critique to the inspector and his supervisor. Periodically, Commonwealth management will accompany its inspectors during the performance of inspections to verify the inspector's continued effectiveness. Finally, NRC will inform Commonwealth management of problems identified during the NRC review of Commonwealth inspection findings for appropriate corrective action.
2. Commonwealth inspectors may periodically accompany NRC inspectors during NRC's programmatic waste package and transportation inspections to maintain familiarity with a licensee's program and NRC inspection requirements. The Commonwealth and NRC may also meet periodically to exchange information and discuss changes in procedures. Commonwealth inspectors may also contact the region based and resident inspectors prior to or during the Commonwealth's independent inspection at the site.
3. Arrangements to gain access to any licensee's facility are a responsibility of the Commonwealth. Specially, individuals planning to conduct inspections at reactor facilities should meet all licensee requirements for site access.

II. PROCEDURES TO BE FOLLOWED BY PENNSYLVANIA FOR INSPECTIONS
CONDUCTED UNDER THE SUBAGREEMENT

A. Pennsylvania will perform the following inspection activities relating to 10 CFR 71:

1. Examine the licensee's written waste shipment records. As the situation allows, observe completed packages so as to:
 - a. Verify that the licensee has marked the package with the applicable general and specific package markings which are required (49 CFR 172.300 through 310).

Verify that for NRC-certified packages, or DOT-revalidated packages of foreign origin, the outside of the package is durably and legibly marked with the package identification marking indicated in the COC or the DOT Competent Authority Certificate.
 - b. Verify that for non-exempted packages, the licensee provides for and accomplishes labeling of each package with the appropriate category of RADIOACTIVE (White-I, Yellow-II, or Yellow-III) label, one each on two opposite sides of the package; and accurately completes the entry of the required information in the blank spaces thereon (49 CFR 172, Subpart E).
 - c. Verify that the licensee provides for and accomplishes monitoring of each completed package to assure that external radiation and removable surface contamination are within the allowable limits [49 CFR 173.475(i), 49 CFR 173.411, 49 CFR 173.433, and 10 CFR 71.87(i) and (j)].
2. Examine the licensee's written waste shipment records. As the situation allows, observe actual transport operations so as to:
 - a. Verify whether the licensee prepared the required shipping paper documentation, so as to accurately include all of the applicable required elements of information, including the shipper's certificate. [NOTE: for licensee private motor vehicle shipments, the certificate is not required (49 CFR 172, Subpart C).]
 - b. For non-exclusive use shipments, verify that the licensee provides to a highway carrier or applies directly to a rail vehicle, the required placards whenever he delivers any quantity of RADIOACTIVE-Yellow-III labeled packages to such carrier for transport (49 CFR 172.506 and 508).
 - c. For exclusive use shipments, verify that the licensee assures that the package and vehicle radiation/contamination levels are within the regulatory limits [49 CFR 173.475(i) and 10 CFR 71.897(i) and (j)].

Verify that except for uranium or thorium ores, the transport vehicle is placarded by the licensee when delivering to a carrier any exclusive-use

shipment for which placarding is required [49 CFR 172, Subpart F, and 49 CFR 173.425(b)(7)].

For exclusive use shipments, verify that shipping paper documentation provided by the licensee to the carrier contains satisfactory instructions for maintenance of exclusive-use shipment controls [49 CFR 173.411(c) and 49 CFR 173.425(b)(9)].

Verify that for exclusive-use shipments of low-specific activity materials, the licensee has provided for the additional specific requirements [49 CFR 173.425(b)(1) through (9)].

- d. Verify that the licensee provides for notification to the consignee before shipment: the dates of shipment and expected arrival, any special loading/unloading or operating instructions whenever any non-exempt fissile material and/or packages containing "highway route controlled quantities" are involved [49 CFR 173.22(b) and 10 CFR 71.89].
- e. Verify that the licensee provides for advance notification to the Governor of a State, or his designee, or any shipment or radioactive waste requiring Type B packaging through, to, or across a state boundary (10 CFR 71.97). [NOTE: This requirement is not the same as that required for safeguards purposes pursuant to 10 CFR 73.72.]

3. Review the licensee's records and reports to verify that a system is in place to:

- a. Maintain on file for two years after shipment a record of each shipment of licensed material (which is not exempt there from) and that such records contain the required information [10 CFR 71.87 and 10 CFR 71.91(a)].
- b. Reports to the director, NMSS, within 30 days, any instances where there has been a significant reduction in the effectiveness of any packaging during its use; providing additionally the details of any defects of safety significance to the packaging after first use and the means employed to repair such defects to prevent their recurrence (10 CFR 71.95).
- c. Immediately report to DOT, when transporting licensed material as a private carrier, any incident that occurs in which as a direct result of the radioactive material; any person is killed; receives injuries requiring hospitalization; property damage exceeds \$59,000; or fire, breakage, spillage, or suspected radioactive contamination occurs (49 CFR 171.15 and 49 CFR 171.16).

B. Pennsylvania will perform the following inspection activities relating to 10 CFR Parts 20 and 61:

- 1. Review the licensee's record and, as the situation allows, observe actual packages and transport activities to verify that each shipment of radioactive waste intended for off-site disposal to a broker or a licensed land disposal facility is accompanied

by a shipment manifest which includes all of the required information [10 CFR 20.311(b) and (c)].

2. Review the licensee's documentation and records to determine whether procedures have been established and are being maintained to properly classify all low-level wastes according to 10 CFR 61.55.
 3. Review the licensee's documentation and records to determine whether procedures have been established and are being maintained, to properly characterize low-level waste in conformance with the requirements of 10 CFR 61.56.
 4. Review the licensee's records and as the situation allows, observe actual packages and transport activities to verify that each package of low-level waste intended for shipment to a licensed land disposal facility is labeled, as appropriate, to identify it as Class A, B, or C waste in accordance with the classification criteria of 10 CFR 61.55 [10 CFR 20.311(d)(2)].
 5. Review the licensee's records and, as the situation allows, observe actual packages and transport activities to verify that the licensee has forwarded to receptionist or delivered to waste collectors at the time of shipment a copy of the waste manifest. Verify that acknowledgement of receipt of the manifest is obtained. Verify that the licensee has a procedure in place to effect an investigation in any instances wherein acknowledgement of receipt of the shipment has not been received within the specified period. Verify that procedures are in place to report such investigations to the appropriate NRC Regional Office and file the required written report [10 CFR 20.311(d), (3), (f) and (h)].
 6. Review the licensee's records to verify that the applicable disposal site license conditions are being met. Verify that the licensee has on file a current version of the disposal site license.
- C. Inspections performed by the Commonwealth for and on behalf of the Commission are not to include those elements of NRC inspection procedures dealing with evaluation of the licensee's written procedures, equipment quality control, programs, training or staffing.

III. DOCUMENTATION OF INSPECTION FINDINGS

Following each inspection, the Commonwealth will document the areas covered and findings of the inspection in an inspection report using guidance set out in NRC Inspection and Enforcement Manual Chapters 0610 and 0611. Following Commonwealth management approval, the report will be sent to the NRC contact listed in Section 9 of the Subagreement with a copy to the licensee. The Commonwealth will complete and forward the inspection report to the NRC within 30 days of completion of the inspection. Following appropriate NRC review, the report will be placed in the Public Document Room and a request sent to the licensee by the NRC for proper corrective action if deemed necessary. For those inspections performed by the Commonwealth which result in deficiencies in compliance with NRC regulations, the

Commonwealth shall identify the deficiencies in the cover letter transmitting the report, and specify that any enforcement action is a responsibility of the NRC. In addition, when any findings which would become a violation once the shipment departs the plant gate are identified, such findings should be furnished to the licensee and the NRC Resident Inspector before the shipment departs the licensee's site. It is the Commission's sole discretion as to whether the licensee will be requested or required to take corrective action or to respond to discrepancies in compliance with NRC regulations as a result of findings from these inspections. Commonwealth inspectors will provide support to NRC during any hearings and other meetings relating to their inspections, as required.

IV. CHANGES TO IMPLEMENTING PROCEDURES

These implementing procedures may be changed by mutual written agreement between the Director, Division of Radiation Safety and Safeguards, NRC, and the Chief, Division of Nuclear Safety, Commonwealth of Pennsylvania.

FOR THE NUCLEAR REGULATORY COMMISSION

Division of Radiation Safety and Safeguards

Dated: August 17, 1987

FOR THE COMMONWEALTH OF PENNSYLVANIA

Division of Nuclear Safety

Dated: September 16, 1987

Appendix B

BUREAU OF RADIATION PROTECTION CIVIL PENALTY ASSESSMENT PROCEDURE

I. INTRODUCTION/BACKGROUND

The Bureau of Radiation Protection (“BRP”) must ensure compliance with radiation protection statutes, regulations and licenses promulgated thereunder in order to protect the public health and safety as well as the natural environment from potential hazards which may result from the use of radiation sources or radioactive materials or the disposal of low-level radioactive waste.

Section §308(e) of the Radiation Protection Act authorizes the Department of Environmental Protection (“Department”) to assess a civil penalty for a violation of the act, a regulation, a license or an order of the Department. The civil penalty shall not exceed \$25,000 plus \$5,000 for each day of continued violation. 35 P.S. §7110.308(e).

Under §504(e) of the Low-Level Radioactive Waste Disposal Act, the Department is authorized to assess a civil penalty for a violation of the act, a regulation or an order of the Department. The civil penalty shall not exceed \$25,000 for each violation. 35 P.S. §7130.504(e). Each day of continued violation shall constitute a separate offense. 35 P.S. §7130.504(d).

When assessing a civil penalty, the Department will consider factors including, but not limited to, the willfulness of the violation, gravity of the violation, good faith of the person charged, previous violation history, danger to public health and welfare, damage to the air, water, land or other natural resources of the Commonwealth. The Department will also consider the cost of restoration or abatement and savings resultant to the violator, deterrence of future misconduct by the same violator or other similarly situated persons, and any other relevant facts. 35 P.S. §§7110.308(e) and 7130.504(e)(2).

The person charged with a violation and assessed a civil penalty will have thirty (30) days to pay the assessed penalty in full or, if the person desires to contest either the amount of the penalty or the fact of violation, an appeal of the departmental action must be filed with the Environmental Hearing Board (“EHB”) within thirty (30) days of receipt of the final civil penalty assessment. Failure to appeal the Departmental action to the EHB within the 30-day appeal period will result in a waiver of all rights to contest the violation or the amount of the civil penalty. 35 P.S. §§7110.308(e) and 7130.504(e)(3). Civil Penalties collected by the Department, whether by unilateral assessment or consent assessment, are deposited in the Radiation Protection Fund, for the Department's use in carrying out its powers and duties under the Radiation Protection Act.

This civil penalty assessment procedure is designed to encourage compliance with departmental statutes, regulations, licenses and orders and to protect the public health and safety through the assessment of civil penalties in a consistent manner. *However, this civil penalty assessment procedure is a statement of policy and is not a regulation.* The Department reserves the right to deviate from this policy when circumstances warrant based on the department’s administrative discretion.

II. PURPOSE

The purpose of this document is to establish a BRP policy and procedure for the assessment of civil penalties for violations of applicable statutes, regulations, licenses and orders issued thereunder. This document is limited to describing the procedure for the assessment of civil penalties.

III. STATUTORY AUTHORITY

The Department of Environmental Protection, Bureau of Radiation Protection derives enforcement authority from the Radiation Protection Act, act of July 10, 1984 (P.L. 688, No. 147) (35 P.S. §§7110.101-7110.703); the Radon Certification Act, act of July 9, 1987 (P.L. 238, No. 43) (63 P.S. §§2001-2014); and the Low Level Radioactive Waste Disposal Act, act of February 9, 1988 (P.L. 31, No. 12) (35 P.S. §§7130.101-7130.905).

IV. GUIDANCE FOR DETERMINING THE SEVERITY OF A VIOLATION

Whenever a civil penalty is assessed, the following review criteria will be considered when establishing the severity of a violation. However, violations not enumerated in the following categories will be evaluated pursuant to Section 308(e) of the Radiation Protection Act, 35 P.S. §7110.308(e), and where applicable, Section 504(e) of the Low-Level Radioactive Waste Disposal Act, 35 P.S. §7130.504(e).

A. Level I Violation

A Level I Violation is an act or omission contrary to applicable statutes, regulations, terms of license, registration, order, exemption or variance which result in an **actual exposure** of a person to radiation, or radioactive contamination of the environment. Examples of Level I violations will include, but not be limited to:

1. Violations resulting in serious physical injury, illness or death.
2. Violations resulting in exposure to patients, occupationally-exposed individuals, or members of the general public.
3. Violations resulting in damage to, destruction of or radioactive contamination of property or the environment.
4. Failure to comply with immediate notification requirements prescribed in 10 CFR 20.2201(a)(i) and 10 CFR 20.2202(a) incorporated by reference.
5. Violations resulting from the failure to report to the Department a stolen, lost or missing radiation producing machine immediately as specified in 25 Pa. Code §219.221(1).
6. Violations which cause injury to the general public.
7. Failure to comply with radiation dose limits set forth in 25 Pa. Code §219.5 (Incorporation by Reference) and 10 CFR Part 20, subpart C and D.

8. Failure to comply with the requirements for reporting medical events set forth in 25 Pa. Code §219.228 and 10 CFR 35.3045 incorporated by reference.
9. Violations which result in the radioactive contamination of the waters of the Commonwealth.

B. Level II Violation

A Level II Violation is an act or omission, contrary to applicable statutes or regulations, or terms of a license, registration, order or exemption that has the **potential to result in exposure** to radiation or radioactive contamination of the environment, or which impairs the Department's ability to administer the Radiation Protection program. Examples of Level II violations will include, but not be limited to:

1. Failure to comply with twenty-four (24) hour notification requirements prescribed in 10 CFR 20.2202(b) (relating to notification of incidents) incorporated by reference.
2. Failure to obtain a license for radioactive material or to register radiation sources as required under applicable statutes and regulations.
3. Failure to comply with licensing or registration requirements, including notice of acquisition, transfer, installation or disposal, set forth in 25 Pa. Code.
4. Violations which may result in the release of radioactive materials with the subsequent contamination of property or the environment.
5. Violations which may result in radioactive contamination of the waters of the Commonwealth.
6. Failure to permit access to an authorized representative of the Department to perform an inspection or investigation.
7. Failure to comply with radon certification requirements under the Radon Certification Act, or 25 Pa. Code Chapter 240 (relating to radon certification).
8. Failure to survey analytical x-ray machines following repair or repositioning of components as required under 25 Pa. Code §227.12a(d).

C. Level III Violation

A Level III Violation is an act or omission, contrary to applicable statutes, regulations, or terms of a license, registration, or exemption or Departmental orders which include violations that are **administrative or clerical in nature and do not** result in actual or potential radiation exposure, radioactive contamination of the environment, or pose a threat to public health and safety. Examples of Level III violations will include, but not be limited to:

1. Violations which do not result in any actual or potential radiation exposure to an individual, the environment or radioactive contamination of the environment.
2. Violations in which records and reports, other than notifications or documentation referred to in Section B3, above, were not on file or otherwise available for inspection, or which were not filed with the Department, or were not furnished to employees.
3. Violations in which instructions or regulations were not provided to appropriate personnel, or licenses, notices or records were not posted in accordance with applicable regulations.
4. Violations for failure of a person to pay annual registration or license fees as required under 25 Pa. Code Chapter 218.
5. Violations resulting from the failure to make a written follow up report to the Department regarding the theft or loss of a radiation source within thirty (30) days of the immediate telephone report as specified in 25 Pa. Code §219.221(2).

V. GUIDANCE FOR DETERMINING THE CULPABILITY OF A VIOLATOR

In determining the violator's culpability, the Department will consider whether the violations resulted from willful, reckless or negligent acts or omissions. The Department will also consider circumstances in which violations are accidental in nature. For purposes of determining the violator's culpability, the following definitions apply:

"Accidental Violation" - A violation resulting from factors beyond the control of the violator and, therefore, could not reasonably have been prevented.

"Negligent Violation" - A violation resulting from failure to identify, recognize, correct, or prevent a condition due to indifference, lack of reasonable care, or due diligence.

"Reckless Violation" - A violation resulting from the disregard of an obvious risk, the existence, nature and possible consequence of which are known or of which prior warning had been given.

"Willful Violation" - A deliberate act or omission with prior knowledge that the act, or omission constituted a violation of applicable environmental statutes, regulations, or departmental orders. Evidence of withholding or falsification of information will be considered examples of willful acts of the violator.

VI. PROCEDURES FOR THE ASSESSMENT AND CALCULATION OF CIVIL PENALTIES

A. The BRP will review each violation of applicable statutes, regulations, or departmental orders to determine whether assessment of a civil penalty is warranted. The Department will consider severity of the violation and culpability of the violator when assessing a civil penalty. The following types of violations will generally result in the mandatory assessment of a civil penalty:

1. Issuance of a cease and desist order - (recommended minimum penalty: \$1,000).

2. Failure to pay applicable fees - (recommended minimum penalty: 3 times the unpaid fee).
3. Failure to comply with other Departmental orders - (recommended minimum penalty: \$1000).
4. Hindrance, obstruction or delay of an agent or employee of the Department during the conduct of an inspection or investigation - (recommended minimum penalty: \$2,500).

B. The following procedure will be used to calculate the dollar amount of the civil penalty:

- Step 1.** Calculation of the dollar amount of the proposed civil penalty requires classification of the severity of the violation as Level I, Level II, or Level III, and determining the degree of culpability of the violator.
- Step 2.** The matrix cell correlating to the violation classification (i.e., Level I, negligent), is located and the dollar amount is recorded in the Base Assessment section of the Civil Penalty Assessment Worksheet.
- Step 3.** The Department will consider the good faith efforts of the violator to correct the violations. The base civil penalty assessment may be adjusted by up to fifty percent (50%) based on the violator's demonstration of good faith in complying with statutory or regulatory requirements. There will be no good faith adjustment for willful or reckless violations.

The Department may consider the speed in which a violation is corrected as an indication of good faith in correcting the violation. Good faith can also be manifested by the violator's prompt self-reporting of noncompliance. (See: Policy to Encourage Voluntary Compliance by Means of Environmental Compliance Audits and Implementation of Compliance Management Systems, No. 012-0840-001, for circumstances in which voluntary self-reporting may obviate all civil penalties for a violation.) However, when self-reporting of the violation is required by law, or where the violator demonstrates a lack of good faith in taking corrective action, the Department will not consider a reduction in the proposed assessment.

An adjustment to the base assessment based upon a violator's demonstration of good faith is recorded in the *Good Faith Adjustment Section* of the Civil Penalty Assessment Worksheet.

- Step 4.** Cost to the Commonwealth will be determined on a separate ledger, summed and recorded in the *Cost to The Commonwealth* section of the worksheet. The computation of such costs may include, but are not limited to, wages or salaries, benefits, transportation cost, meals and lodging, laboratory costs, and legal costs.

- Step 5.** The economic benefit to the violator for failure to comply with applicable statutes, regulations or departmental orders will be determined and recorded in the Savings to The Violator section of the worksheet. In determining the savings to the violator, the Department will consider benefits derived from avoided or delayed costs within the statutory maximum dollar amount (\$25,000). A penalty may be increased in an amount equal to the savings to the violator.
- Step 6.** The cost necessary for the abatement of an acute problem or long term environmental restoration will be determined and recorded in the *Restoration/Abatement* section of the worksheet. Estimates for the cost of restoration or abatement will be accomplished through the use of a competitive procurement process when feasible.
- Step 7.** The Department will consider the violator's compliance history when determining the total dollar amount of the assessed Civil Penalty. History of the violator will be reviewed of a period of up to ten (10) years. For each violation occurring during the previous ten (10) year period, the base penalty may be increased by an amount deemed appropriate to deter further violations. For purpose of reviewing compliance history, evaluation of previous violations will include any order, consent decree, agreement, Notice of Violation, Summary of Inspection Findings, civil penalty assessment, criminal convictions or adjudicated proceeding.
- Step 8.** All factors will be determined and recorded in the *Total Assessment* section of the worksheet.
- Step 9.** The worksheet with attached cost justification, will be forwarded to appropriate legal counsel for review.

VII. NOTIFICATION AND APPEAL

Upon a determination that assessment of a civil penalty is warranted, the following procedures will be utilized:

- A. The Department may serve upon the violator a Notice of Proposed Civil Penalty Assessment or a proposed Consent Assessment of Civil Penalty by certified mail or hand delivery.
- B. These documents will include the date of the violation, a summary of the violation, and the amount of the proposed Civil Penalty Assessment.
- C. The Notice of Proposed Civil Penalty Assessment or a cover letter to the proposed Consent Assessment of Civil Penalty will advise the violator that, if requested within fifteen (15) days of receipt of said Notice, the Department will schedule a conference or telephone conference to discuss the final Civil Penalty assessment. If the violator does not request a conference within the fifteen (15) day period, the Department will proceed to issue the final Civil Penalty Assessment based upon information currently before the Department.

- D. Upon receiving a request for a conference, the Department will schedule the conference or telephone conference at a time convenient to both parties.
- E. During the conference, the Department will consider evidence relative to matters pertaining to the nature of the violation, amount of civil penalty and/or manner of payment. Upon completion of the conference, the issues may be mutually resolved or the Department will affirm, adjust or vacate the proposed civil penalty assessment.
- F. If matters related to the proposed civil penalty assessment are mutually agreed upon, the Department will revise or if necessary draft and execute a Consent Assessment of Civil Penalty document.
- G. If the conference does not result in resolution of matters pertaining to the proposed assessment, the Department will timely proceed to assess the final civil penalty. The civil penalty assessment will inform the violator of the right to appeal to the Environmental Hearing Board the fact of the violation, the amount of the civil penalty, or both, within thirty (30) days of said notice.

VIII. CIVIL PENALTY ASSESSMENT MATRIX

Civil penalty amounts listed in each matrix cell reflect suggested minimum and maximum dollar amounts per violation. Bureau of Radiation Protection personnel calculating proposed assessment will carefully consider the culpability and severity of the violation when assessing the base civil penalty.

The base civil penalty may be raised or lowered because of factors specified in the Civil Penalty Assessment Worksheet. Civil penalties assessed under §308(e) of the Radiation Protection Act shall not exceed \$25,000 plus up to \$5,000 for each day of continued violation.

However, in no case will a final civil penalty assessed under §504(e) of the Low Level Radioactive Waste Disposal Act exceed \$25,000 per violation. Each day of continued violation of applicable statutes, regulations, or orders will constitute a separate violation.

Violation Severity Levels

| C u l p a b i l i t y | Level I | Level II | Level III |
|---|---------------------|--------------------|-------------------|
| Willful | \$25,000 - \$12,500 | \$12,500 - \$6,250 | \$6,250 - \$3,125 |
| Reckless | \$25,000 - \$10,000 | \$10,000 - \$5,000 | \$5,000 - \$2,500 |
| Negligent | \$25,000 - \$6,250 | \$6,250 - \$3,125 | \$3,125 - \$1,560 |
| Accidental (None) | \$25,000 - \$3,750 | \$3,570 - \$1,875 | \$1,875 - \$315 |

The Department uses a gravity-based matrix with the axes being severity of violation and degree of culpability. The matrix utilizes a scale of 100-50-25 percent of the statutory maximum daily penalty of \$25,000. The minimum penalty of \$315 is based on a civil penalty equal to three (3) times unpaid annual fees, the amount due the Department for nonpayment of the annual registration fee at dental, podiatric, and veterinary facilities. This matrix does not preclude Department consideration of any relevant facts which might not be otherwise explicitly accounted for.

IX. SIGNATURE

Approved for the Department

Director
Bureau of Radiation Protection

MISSION STATEMENT

Our mission is to safeguard the public health and safety and the environment from harmful and unwanted, unnecessary or inappropriate exposure from controllable radiation sources.

Appendix C

Department of Environmental Protection Bureau of Radiation Protection Civil Penalty Assessment Worksheet

I. Identification

Registrant/Licensee Name _____
 Identification Number _____
 Municipality _____
 County _____
 Inspection Date _____
 Inspection Report Date _____
 N.O.V. of Order Date _____

IV. Penalty Action

Penalty Assessed Yes No
 Calculated Amount \$ _____, Date _____
 Proposed Assessment Notice or CACP Date _____
 Assessment Conference Date _____
 Consent Assessment Date _____ Amount \$ _____
 Final Assessment Notice Date _____ Amount \$ _____
 Collection Date _____ Amount \$ _____
 E.H.B. Appeal Date _____

II. Mandatory Penalty

Issuance of a Cease and Desist Order - Minimum Penalty \$1,000
 Issuance of a Departmental Order - Minimum Penalty \$225.
 Failure to Comply with a Departmental Order - Minimum Penalty \$500.
 Hinder, Obstruct, or Delay a D.E.P. agent or employee Minimum Penalty \$1,000.

III.

| Penalty Calculation Criteria | | | | Violation No. _____ | Violation No. _____ |
|--|------------------------|-----------------------|----------------------|--|--|
| Culpability | Severity | | | Base Assessment | Base Assessment |
| | Level I | Level II | Level III | | |
| Willful | \$25,000 - \$12,500 | \$12,500 - \$6,250 | \$6,250 - \$3,125 | \$ _____ | \$ _____ |
| Reckless | \$25,000 - \$10,000 | \$10,000 - \$5,000 | \$5,000 - \$2,500 | Continuing Violation Up to \$5000 per day | Continuing Violation Up to \$5000 per day |
| Negligent | \$25,000 - \$6,250 | \$6,250 - \$3,125 | \$3,125 - \$1,560 | \$ _____ | \$ _____ |
| Accidental (none) | \$25,000 - \$3,750 | \$3,570 - \$1,875 | \$1,875 - \$315 | \$ _____ | \$ _____ |
| Subtotal Assessment | | | | \$ _____ | \$ _____ |
| Good Faith Adjustment | | | | \$ _____ +/- | \$ _____ +/- |
| Cost to the Commonwealth | | | | \$ _____ | \$ _____ |
| Savings to the Violator | | | | \$ _____ | \$ _____ |
| Restoration/Abatement Cost | | | | \$ _____ | \$ _____ |
| Subtotal | | | | \$ _____ | \$ _____ |
| Violation History | | | | \$ _____ | \$ _____ |
| Subtotal plus amount for repeated violations | | | | \$ _____ | \$ _____ |
| Total Assessment | | | | \$ _____ | \$ _____ |

Reviewer _____ Date _____

PA Agreement State Program
'To Be'
Staff Needs Analysis

| | A | B | C | D | E | F | G | H | I | J | K | L | M | O |
|----|---|----------------------|---------------------------|---|----------------------------|------------------|--------------------------|----------------------------|-------------------------------|----------------|----------------------|----------------------|-------------------------|---------------------------------------|
| 1 | License Categories | License Fee Category | Number of PA NRC Licenses | Number of Out of State NRC Licenses in PA | Licensing | | | | | Inspecting | | | | |
| 2 | | | | | Number of PA NARM Licenses | Unlicensed Sites | Licensing Actions / year | Avg. Staff Days Per action | Licensing Staff Days (Note 1) | Priority Class | Multiplier for Insp. | Inspections Per Year | Staff Days / Inspection | Inspection Staff Days with multiplier |
| 3 | Decommissioning, Decon, Restoration** | 14 | 6 | 2 | 1 | 5 | 72 | 22 | 1584 | D | 42.0 | 504.0 | 3.00 | 1512.0 |
| 4 | SNM | 1D | 16 | 0 | | | 2 | 5 | 10 | 5 | 0.2 | 3.2 | 4.00 | 12.8 |
| 5 | SM for UF6 | 2A | 1 | 0 | | | 1 | 5 | 5 | 5 | 0.2 | 0.2 | 4.00 | 0.8 |
| 6 | SM for Shielding | 2B | 4 | 0 | | | 1 | 5 | 5 | 1 | 1.0 | 4.0 | 2.50 | 10.0 |
| 7 | All other SM | 2C | 4 | 0 | | | 1 | 5 | 5 | 5 | 0.2 | 0.8 | 3.75 | 3.0 |
| 8 | M & D Broadscope | 3A | | | 2 | | 1 | 5 | 5 | 2 | 0.5 | 1.0 | 4.00 | 4.0 |
| 9 | Part 30 Manu & Dist | 3B | 5 | 0 | | | 2 | 5 | 10 | 5 | 0.2 | 1.0 | 3.00 | 3.0 |
| 10 | Pharmaceutical Manu & Dist | 3C | 6 | 7 | 21 | | 12 | 2 | 24 | 2 | 0.5 | 13.5 | 4.50 | 60.8 |
| 11 | Pharmaceutical Distribution | 3D | 1 | 0 | | | 1 | 5 | 5 | 5 | 0.2 | 0.2 | 4.50 | 0.9 |
| 12 | Irradiator Shielded Source | 3E | 21 | 0 | | | 3 | 5 | 150 | 5 | 0.2 | 4.2 | 5.00 | 21.0 |
| 13 | Irradiator<10K Curies | 3F | 1 | 0 | | | 1 | 5 | 30 | 5 | 0.2 | 0.2 | 3.00 | 0.6 |
| 14 | Broad Scope R & D | 3L | 13 | 0 | 7 | | 5 | 3 | 15 | 3 | 0.3 | 6.7 | 5.00 | 33.3 |
| 15 | R & D | 3M | 50 | 1 | 2 | | 15 | 3 | 45 | 5 | 0.2 | 10.4 | 4.00 | 41.6 |
| 16 | Services other than leak testing, waste disposal, Calibration | 3N | 7 | 1 | | | 1 | 3 | 3 | 5 | 0.2 | 1.4 | 2.50 | 3.5 |
| 17 | Industrial Radiography | 3O | 11 | 10 | | | 10 | 5 | 50 | 1 | 1.0 | 11.0 | 6.00 | 66.0 |
| 18 | Other Material | 3P | 226 | 24 | 79 | | 80 | 2 | 160 | 4 | 0.3 | 76.3 | 4.00 | 305.0 |
| 19 | Waste Receipt for re-packaging | 4B | 1 | 0 | 3 | | 1 | 5 | 5 | 2 | 0.5 | 2.0 | 4.00 | 8.0 |
| 20 | Waste receipt of prepackaged for disposal | 4C | 1 | 0 | | | 1 | 5 | 5 | 3 | 0.3 | 0.3 | 2.50 | 0.8 |
| 21 | Well logging & Non field flood tracers | 5A | 4 | 2 | 1 | | 1 | 5 | 5 | 3 | 0.3 | 1.7 | 2.50 | 4.2 |
| 22 | Nuclear Laundry | 6A | 2 | 0 | | | 1 | 5 | 5 | 3 | 0.3 | 0.7 | 2.50 | 1.7 |
| 23 | Human Use Broad Scope -Teletherapy | 7A | 5 | 0 | | | 1 | 3 | 3 | 2 | 0.5 | 2.5 | 3.00 | 7.5 |
| 24 | Human Use Broad Scope except Teletherapy | 7B | 10 | 0 | 8 | | 1 | 3 | 3 | 2 | 0.5 | 9.0 | 5.00 | 45.0 |
| 25 | Human Use Specific License | 7C | 278 | 4 | 300 | | 150 | 3 | 450 | 3 | 0.3 | 192.7 | 4.50 | 867.0 |
| 26 | Calibration Sources, Storage, etc. | 8A | | | 36 | | 4 | 2 | 8 | 5 | 0.2 | 7.2 | 2.00 | 14.4 |
| 27 | SUBTOTALS | | 673 | 51 | 460 | 5 | 368 | | 2590 | | | 854.1 | | 3026.9 |
| 28 | | | | | | | | | | | | | | |
| 29 | Total Licenses in PA* | 1184 | | | | | | FTE's= | 12.33 | | | | | 14.41 |
| 30 | * Total Number of active licenses in PA. This number will be reduced when NRC and PA licenses are combined. | | | | | | | | "=H28/210" | | | | | "=N28/210" |
| 31 | ** Inspection for Decommissioning means site visit and not necessarily a documented inspection | | | | | | | | | | | | | |
| 32 | 210 work day year = 365 - 104 (weekends) - 11 (holidays) - 20 (leave) - 10 (training) - 10 (meetings) | | | | | | | | | | | | | |
| 33 | | | | | | | | | | | | | | |
| 34 | Note 1: Licensing staff days includes regional staff time in document review and preparation. | | | | | | | | | | | | | |

| | A | B |
|----|---|----------|
| 1 | Name | Location |
| 2 | Chippo, John S. | CO |
| 3 | Craig, Bridget M. | SERO |
| 4 | Croll, Richard F. | SERO |
| 5 | Derstine, Terry W., Radiation Protection Program Manager, | SERO |
| 6 | Dworsak, Gerald R. | SCRO |
| 7 | Finney, Aleta L. | SERO |
| 8 | Gardosik, Andrew T. | SCRO |
| 9 | Hamm, Ronald J., Chief, Licensing Section, Radiation Control D | CO |
| 10 | Kitzer, Roy G. | SCRO |
| 11 | Koshy, Joseph A. | SERO |
| 12 | Lewis, Tonda L., Chief, Environmental Surveillance Section, | CO |
| 13 | Maiers, Robert C., Chief, Decommissioning and Surveillance Div | CO |
| 14 | Martin, Meredith May | SERO |
| 15 | McElwain, Delvy J. | SWRO |
| 16 | Ott, Christopher A. | CO |
| 17 | Peffer, Frank J. | SCRO |
| 18 | Pryber, Joseph A., Chief, Radioactive Materials Section, | SERO |
| 19 | Rittiger, Christopher L. | SWRO |
| 20 | Rutzmoser, Kurt H. | SERO |
| 21 | Shearer, Dwight A. , Chief, Radioactive Materials Section, | SWRO |
| 22 | Smalls, Charley M. | CO |
| 23 | Urciuolo, L. Ray, Chief, Radiation Control Division, Central Office | CO |
| 24 | Werner, Bryan R. | CO |
| 25 | Whitehead, Jeffrey L. | CO |
| 26 | Williams, Stephen E., Radiation Protection Program Manager, | SCRO |
| 27 | Wilson, Scott L. | CO |
| 28 | Woods, Roy V. | SWRO |
| 29 | Yusko, James G., Radiation Protection Program Manager, | SWRO |
| 30 | Vacancy | CO RAM |
| 31 | Vacancy | CO RAM |
| 32 | Vacancy | CO D&D |
| 33 | Vacancy | CO D&D |
| 34 | Vacancy | SERO |
| 35 | Vacancy | SERO |
| 36 | Vacancy | SERO |
| 37 | Vacancy | SERO |
| 38 | Vacancy | SCRO |
| 39 | Vacancy | SCRO |
| 40 | Vacancy | SWRO |
| 41 | Vacancy | SWRO |
| 42 | Vacancy | SWRO |
| 43 | | |
| 44 | Plus more Vacancies for Northern Tier Regions if needed | |

| Job Code | Pay Scale Group | Pay Scale Type | Bargaining Unit | Civil Service or Non-Civil Service | Executive Board Change | Last Change Effective |
|----------|-----------------|----------------|-----------------|------------------------------------|------------------------|-----------------------|
| 75260 | 06 | ST | B4 | C | 622-15 | 5/3/1999 |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

05/03/1999

RADIATION PROTECTION SPECIALIST

DEFINITION: This is limited professional and advanced technical work in the monitoring and control of radiation sources in the Department of Environmental Protection.

An employee in this class conducts routine inspections of radiation producing equipment and radioactive materials programs, collects environmental samples in support of the statewide radiation monitoring program and/or collects and exchanges dosimeters that measure radiation exposures in and around nuclear power electric generating stations and other licensed facilities. Inspection work at this level is characterized by the relatively limited variability and complexity of the equipment and programs, with emphasis on determining the presence or absence of basic safety features and sound operating procedures. Routine inspections of radiation producing equipment include but are not limited to intra-oral dental units, podiatry units, diagnostic veterinary units, electron microscopes, cabinet x-ray units and baggage x-ray units. Routine inspections of radioactive materials programs include but are not limited to gas chromatography units, lead-in-paint analyzers, liquid scintillation counters and check sources. Employees perform these inspections independently and may recommend ways of reducing patient and operator exposures. Employees at this level may also participate as members of an inspection team or accompany higher-level health physicists to learn specialized inspection techniques. Work is assigned in the form of specific facilities to inspect or according to established sampling and dosimeter exchange schedules. Work is reviewed by a professional supervisor for timeliness, completeness and adherence to established procedures and standards.

EXAMPLES OF WORK: Conducts routine inspections of radiation producing equipment and radioactive materials programs in medical and industrial settings for compliance with program requirements.

Determines or estimates operator exposure, patient skin entrance exposure and restricted or unrestricted area exposure.

Prepares reports to document the results of inspections and sampling activities.

Collects samples of surface water, air particulates, precipitation, milk, fish, sediment, soil and vegetation, and prepares and sends samples to environmental laboratories for radioisotopic analysis.

Travels to field sites to collect environmental samples, exchange thermoluminescent dosimeters and exchange air sampler filters and cartridges.

Performs dosimeter readout and analysis using standard operating

procedures and prepares reports of data results.

Ensures the proper operational condition of thermoluminescent dosimeter system by performing periodic calibration and maintenance procedures and arranging for repairs.

Prepares training and documentation on the operation of the thermoluminescent dosimeter system.

Tests, calibrates and performs routine preventative maintenance on radiological survey and sampling equipment.

Operates a motor vehicle to travel to various work sites.

Performs similar work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of radiation protection principles and current practices related to the recognition, control and elimination of radiation hazards.

Knowledge of state and federal laws, regulations, policies and procedures governing radiation protection.

Knowledge of the methods and techniques used in obtaining, collecting and transporting samples in various media to evaluate radiation exposures.

Knowledge of radioactive waste disposal techniques and procedures.

Ability to operate, calibrate and perform routine preventative maintenance on radiation detection equipment and environmental sampling equipment.

Ability to communicate effectively, both orally and in writing.

Ability to develop and deliver effective presentations and training sessions for Departmental staff, facility operators and the public.

Ability to establish and maintain effective working relationships with coworkers, facility operators and the public.

Ability to operate a motor vehicle.

MINIMUM EXPERIENCE AND TRAINING: One year as an Environmental Trainee;

or

Any equivalent combination of experience and training.

NECESSARY SPECIAL REQUIREMENT: Possession of a valid Pennsylvania driver's license.

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| <u>12480</u> | <u>09</u> | <u>ST</u> | <u>B4</u> | <u>C</u> | <u>999-99</u> | <u>5/1/1995</u> |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

05/01/1985
12480

NUCLEAR ENGINEER 2

DEFINITION: This is advanced professional work pertaining to the evaluation of design, construction, operation, and decommissioning of nuclear facilities within the Commonwealth.

An employee in this class evaluates or causes to be evaluated those engineered safeguard, radioactive waste treatment, and other systems important to the safety of these facilities as to their effectiveness and reliability in protecting the citizens and their environment from the possible effects of abnormal operation or accident. This includes travel for the continuing evaluation of those systems important to safety that may require redesign and improvement, so as to assure the Commonwealth that these facilities can be operated safely and that state-of-the-art designs, materials, and construction techniques are being employed. Work includes providing expert testimony and assistance to legal staff in proceedings relating to matters of safety or environmental impact of nuclear facilities; providing consultation on the facility emergency plans; reviewing and evaluating technical reports dealing with diverse aspects of nuclear facilities and their related fuel cycles. Work is assigned on a site basis or on an individual-safeguard basis. This individual has the authority to make technical decisions within the scope of his responsibilities. Work is reviewed by a supervisor for attainment of program goals and objectives, completeness, and results obtained.

EXAMPLES OF WORK: Participates in the planning and development of systematic techniques for the evaluation of specific nuclear projects and systems.

Reviews and evaluates industry and Federal reports pertaining to safety or environmental impact of nuclear facilities to ascertain whether the design, construction, operation, and decommissioning of these facilities provide reasonable assurance of public health and safety.

Participates in Federal inspections or performs independent inspections of those facilities to which he may be assigned responsibility in order to provide practical and continuing assurance that all applicable requirements are being satisfied and good engineering practices are being

adhered to.

Participates in informing the public about nuclear safety.

Reviews and evaluates technical reports dealing with diverse aspects of nuclear facilities and their fuel cycles.

Participates in the interactions between Federal regulators and applicants for Federal permits and licenses for construction, operation, alteration, and decommissioning of nuclear facilities affecting the Commonwealth.

Participates in the efforts of the nuclear engineering community toward optimizing nuclear system safety and toward the furtherance of public education in matters relating to nuclear safety.

Provides consultation and assistance to other agency staff in the development and functioning of nuclear facility emergency plans.

Prepares reports, letters and memoranda relating to the ability of nuclear facilities and systems to operate in a manner so as to protect public health and safety.

Evaluates nuclear facility design, construction, operation and decommissioning to ascertain whether they meet all applicable Federal and State requirements.

Evaluates the validity of certain assumptions made in estimating the effectiveness and reliability of nuclear system components in mitigating the consequences of various system failure.

Conducts on-the-job training to junior engineers.

Provides expert testimony and assistance in legal proceedings in matters related to nuclear safety.

Travels to and from worksites.

Performs related work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of diverse aspects of design, construction, operation, and decommissioning light water nuclear reactors.

Knowledge of the fundamental nuclear engineering specialties such as steady state and transient nucleonics, fluid dynamics, heat transfer, fission processes, fission products, and accompanying radiation, mechanical structural design aspects of nuclear plants.

Knowledge of Federal rules and regulations concerning design,

construction, and operation of nuclear facilities.

Knowledge of diverse aspects of other environmental and safety issues related to nuclear facilities or their associated fuel cycles.

Ability to recognize and evaluate features of nuclear facilities which have an impact on plant safety and reliability and to make responsible recommendations regarding their acceptability as per good nuclear practices.

Ability to read and write and communicate orally in English.

Ability to perform mathematical calculations at the GED 6 level.

Ability to prepare and analyze technical reports.

Ability to establish and maintain effective working relationships with associates, counterparts in various agencies and agencies of other states, industry, professional and non-professional groups and organization, and the general public.

Ability to prepare and develop presentations to public officials and the general public.

MINIMUM EXPERIENCE AND TRAINING: Three years of experience in responsible nuclear systems safety analysis and a Master's Degree with major course work in nuclear engineering;

or

Five years of experience in responsible nuclear systems safety analysis and a Bachelor's Degree with major course work in an appropriate engineering or science field.

or

Any equivalent combination of experience training.

NECESSARY SPECIAL REQUIREMENT: Certain positions in this class will require licensure as a professional engineer by the Commonwealth of Pennsylvania, or a reciprocal jurisdiction. These are positions where there can be no exemption from such licensure, as defined under Section 5, Exemption from Licensure, of the Professional Engineers Registration Law (as amended).

| Job Code | Pay Scale Group | Pay Scale Type | Bargaining Unit | Civil Service or Non-Civil Service | Executive Board Change | Last Change Effective |
|----------|-----------------|----------------|-----------------|------------------------------------|------------------------|-----------------------|
| 14310 | 07 | ST | B4 | C | 622-12 | 5/3/1999 |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

05/03/1999

14310

RADIATION HEALTH PHYSICIST 1

DEFINITION: This is professional work in the monitoring and control of radiation sources in the Department of Environmental Protection.

An employee in this class inspects radiation producing equipment and radioactive materials programs to ensure compliance with state and federal laws and regulations governing radiation protection. At this level, inspection work is characterized by moderately complex equipment and programs that have significant potential impact on human health and safety. Moderately complex radiation producing equipment includes but is not limited to diagnostic x-ray units, panoramic dental units, fluoroscopes, lithotripters, mammographic x-ray units and enclosed analytical x-ray units. Moderately complex radioactive materials programs include but are not limited to storage only licensees, level/density/thickness gauges, portable gauges and calibration labs. Employees independently perform and document these types of inspections and may participate in complex inspections as developmental assignments or as members of an inspection team. Employees at this level may also demonstrate specialized inspection techniques to coworkers. In the central office, work involves assisting higher-level health physicists in their areas of program responsibility. Work may also include interpreting and participating in the development of regulations, policies, procedures and technical guidance documents for the radiation protection program. Work is assigned in the form of specific goals, objectives and priorities, and reviewed by a professional supervisor for the attainment of objectives, completeness, technical accuracy and overall quality.

EXAMPLES OF WORK: Performs professional work in radiation health physics in a regional office or in the central office.

Independently conducts inspections of moderately complex radiation producing equipment and radioactive materials programs in medical and industrial settings for compliance with program requirements.

Inspects facilities performing mammography for compliance with the Federal Mammography Quality Standards Act; tests diagnostic mammographic x-ray machines and automatic film processors for operation with prescribed tolerances; suggests improvements to optimize mammographic imaging and quality assurance practices; and prepares facility compliance reports.

Conducts inspections of recently installed or assembled diagnostic radiographic and fluoroscopic equipment for compliance with federal assembly regulations.

Inspects firms that test for the presence and concentration of radon to determine compliance with regulations and certification requirements.

Prepares reports to document the results of inspections and makes recommendations on compliance issues.

Reviews applications for small quantity radioisotope use licenses, such as those for private practitioners, clinics, small hospitals and small industrial users, and recommends approval or disapproval, with additional conditions to impose upon the licensee if necessary.

Participates in special studies on new methods of evaluating and controlling radiation hazards.

Makes presentations to scientific and technical organizations and at public meetings concerning issues related to radon and radiation protection.

Participates as a member of a radiation emergency response team during incidents and exercises.

Operates a motor vehicle to travel to various work sites.

Performs similar work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of radiation health physics.

Knowledge of radiation protection principles and current practices related to the recognition, control and elimination of radiation hazards.

Knowledge of state and federal laws, regulations, policies and procedures governing radiation protection.

Knowledge of the methods and techniques used in the collection and analysis of radiological data.

Knowledge of radioactive waste disposal techniques and procedures.

Knowledge of the procedures and techniques used in investigating complaints involving exposure to, or high levels of, radiation.

Ability to conduct surveys and investigations to locate, identify and mitigate radiation hazards and radon problems.

Ability to operate, calibrate and perform routine preventative maintenance on radiation and radon detection equipment and environmental sampling equipment.

Ability to communicate effectively, both orally and in writing.

Ability to determine the appropriate level of enforcement required to encourage or compel compliance with Departmental rules and regulations.

Ability to develop and deliver effective presentations and training sessions for a wide range of audiences, including Departmental staff, facility operators, industry groups, government officials, consultants, special interest groups and the public.

Ability to establish and maintain effective working relationships with coworkers, facility operators, industry groups, legislators, government officials, consultants, special interest groups and the public.

Ability to operate a motor vehicle.

MINIMUM EXPERIENCE AND TRAINING: Two years of professional experience in the recognition, evaluation and control of radiation hazards, and a bachelor's degree with major coursework in the physical, biological or radiological sciences or in engineering, with a minimum of 20 college credits in physical sciences, engineering or mathematics;

or

Six years of technical experience in providing protection to radiation workers, the general public and the environment from the effects of radiation, and possession of a certificate of registration issued by the National Registry of Radiation Protection Technologists;

or

Any equivalent combination of experience and training.

A master's degree in health physics, radiation science, nuclear engineering or a closely related field may be substituted for one year of professional experience in the recognition, evaluation and control of radiation hazards.

A doctoral degree in health physics or a closely related field may be substituted for two years of the required professional experience in the recognition, evaluation and control of radiation hazards.

NECESSARY SPECIAL REQUIREMENT: Certain positions in this class may require possession of a valid Pennsylvania driver's license.

Certain positions in this class may require current certification in mammography issued by the US Food and Drug Administration.

| Job Code | Pay Scale Group | Pay Scale Type | Bargaining Unit | Civil Service or Non-Civil Service | Executive Board Change | Last Change Effective |
|----------|-----------------|----------------|-----------------|------------------------------------|------------------------|-----------------------|
| 14231 | 07 | ST | B3 | C | 999-99 | 5/19/2006 |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

06/01/1989

14231

ENVIRONMENTAL PROTECTION COMPLIANCE SPECIALIST

DEFINITION: This is professional environmental protection compliance work in the Department of Environmental Resources.

An employee in this class performs a variety of professional duties, within an assigned geographic area of an Environmental Protection Region in an environmental specialty, to insure compliance with Commonwealth rules and regulations governing environmental protection. Work involves preparing violation letters, Departmental Orders, and Consent Orders/Agreements; preparing documentation for use in the prosecution of cases; prosecuting cases; conducting enforcement conferences and administrative hearings; negotiating settlements of cases; and negotiating penalties. Work also includes reviewing a variety of enforcement documentation and recommendations made by field personnel and determining priorities. Work includes assisting field personnel in resolving problems involving enforcement of cases, providing advice on rules and regulations to field personnel, reviewing case data with field personnel to determine appropriate enforcement action, notifying field personnel of enforcement action to be taken, and against whom. Work includes training field personnel on how to prosecute cases, documentation techniques for enforcement cases, procedures and techniques for determining penalties and negotiating settlements, and the interpretation and application of environmental protection rules and regulations. Work involves preparing news releases, providing information to reporters regarding enforcement cases, and providing information to facility operators, municipal officials, consultants, and the public on Department programs, functions, rules, regulations, policies and procedures. Work is assigned in the form of goals and objectives and the employee exercises considerable freedom in planning, scheduling, and completing the work. Work is reviewed upon completion by a professional supervisor for completeness, technical accuracy and quality.

EXAMPLES OF WORK: Prepares Departmental Orders indicating violations discovered, corrective action required, control measures or devices to be installed, and time frames for their accomplishment.

Prepares Consent Orders/Agreements indicating violations discovered, corrective action required, control measures or devices to be installed, time frames for their accomplishment, and establishes penalties.

Prepares violation letters indicating violations discovered, citing appropriate rules and regulations, indicating corrective

action required and establishing time limits.

Testifies as an expert or material witness in enforcement cases before District Magistrates, the Environmental Hearing Board, or the courts. Meets with violators and negotiates settlements of enforcement cases in terms of corrective action or devices required and time frames for their accomplishment.

Schedules and conducts enforcement conferences or administrative hearings, provides background data on the case, explains Departmental Orders or Consent Orders/Agreements, and answers questions.

Prepares non-traffic citation forms, files with District Magistrate, and prosecutes case on behalf of the Commonwealth, presenting data and examining and cross examining witnesses; recommends imposition of fines to District Magistrates.

Researches case files and case history and prepares documentation for use in the prosecution of cases by field personnel or legal staff. Contacts legal staff and discusses enforcement cases, seeks clarification on rules and regulations from legal staff.

Assists and provides advice to field personnel on the enforcement of unusual or difficult cases, reviews enforcement recommendation of field personnel and recommends appropriate action to field personnel.

Reviews Departmental Orders, Consent Orders/Agreements, and violation letters prepared by field personnel for content, completeness, technical accuracy, and legal terminology; corrects errors and makes changes or recommendations; approves or disapproves Departmental Orders, Consent Orders/Agreements, and violation letters. Notifies field personnel of major enforcement action to be taken and against which facilities action should be taken.

Conducts evaluation of the enforcement program within an assigned area and prepares a report of recommendations based on the evaluation.

Provides advice to field personnel on the interpretation and application of rules and regulations governing environmental protection.

Conducts surveys, inspections, and investigations of facilities to determine if they are operating within environmental protection rules and regulations.

Trains field personnel on the proper procedures and techniques for prosecuting cases, determining penalties, negotiating settlements, and the interpretation and application of rules, regulations, policies and procedures.

Prepares news releases regarding enforcement cases or activities. Provides information to facility operators, municipal officials, consultants, and the public on Departmental functions, programs, rules, regulations, policies and procedures.

Prepares letters, reports and correspondence.

Operates a motor vehicle to travel to various work sites.

Performs similar work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of the biological, chemical, and physical sciences as related to environmental sanitation, water pollution control, air pollution control, solid waste management, and water quality management.

Knowledge of the Department of Environmental Resources rules, regulations, policies and procedures governing environmental sanitation, water pollution control, air pollution control, solid waste management, and water quality management.

Knowledge of the procedures, techniques, and formats utilized in the preparation of Departmental Orders, Consent Orders/Agreements, and violation letters.

Knowledge of the techniques utilized in the negotiation of settlements involving enforcement of cases.

Knowledge of the procedures utilized in the preparation of non-traffic citation forms.

Knowledge of the procedures and techniques utilized in the documentation of enforcement cases and prosecution of cases.

Knowledge of the procedures and techniques utilized in the evaluation of the enforcement program.

Knowledge of the procedures and techniques utilized in the conduct of surveys, inspections, and investigations, to determine if facilities are operating within environmental protection rules and regulations.

Knowledge of the various physical, chemical, and biological treatment processes.

Knowledge of the basic engineering designs and considerations for facilities.

Skill in negotiating the settlement of enforcement cases in terms of corrective action or devices required and time frames for their accomplishment.

Ability to apply environmental sanitation, water pollution control, air pollution control, solid waste management, and water quality management during the preparation or review of Departmental Orders, Consent Orders/Agreements and violation letters.

Ability to prepare Departmental Orders, Consent Orders/Agreements, and violation letters indicating violations discovered, corrective action required, control measures required, and time frames for their accomplishment.

Ability to interpret environmental sanitation, air pollution control, solid waste management, and water quality management rules regulations, policies and procedures for co-workers, field

personnel, municipal officials, facility operators, and the public.

Ability to prepare documentation required for the prosecution of cases.

Ability to testify as an expert or material witness in enforcement cases before District Magistrates, the Environmental Hearing Board, or the courts.

Ability to conduct evaluations of the enforcement program.

Ability to conduct surveys, inspections, and investigations of facilities to determine if they are operating within environmental sanitation, air pollution control, solid waste management, or water quality rules and regulations.

Ability to prepare and conduct training courses on prosecuting cases, documentation of enforcement cases, determining penalties in enforcement cases, the interpretation and application of environmental sanitation, air pollution control, solid waste management or water quality management and the techniques for negotiating settlements of enforcement cases.

Ability to read and write English at the GED 5 level.

Ability to perform mathematical calculations at the GED 5 level.

Ability to read and understand engineering reports, drawings, blueprints and flow schematics.

Ability to operate a motor vehicle to travel to various work sites.

Sufficient physical stamina to permit working under adverse weather conditions.

MINIMUM EXPERIENCE AND TRAINING: One year of professional experience as a Sanitarian, Air Quality Specialist, Solid Waste Specialist, or Water Quality Specialist;

or

Any equivalent combination of experience and/or training which affords the applicant the required knowledges, skills, and abilities.

NECESSARY SPECIAL REQUIREMENT: Possession of a valid motor vehicle operator's license as issued by the Commonwealth of Pennsylvania.

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| <u>12470</u> | <u>07</u> | <u>ST</u> | <u>B4</u> | <u>C</u> | <u>999-99</u> | <u>7/1/1999</u> |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

05/01/1985

12470

NUCLEAR ENGINEER 1

DEFINITION: This is entry-level professional work pertaining to the evaluation of design, construction, operation, and decommissioning of nuclear facilities within the Commonwealth.

An employee in this class participates in the evaluation of the design, construction, operation, and decommissioning of a nuclear facility for conformance to engineering standards, Federal or State rules and regulations. Work includes traveling to participate in effectiveness and reliability features of nuclear facilities and specific features to the facilities which affect plant safety; participating and assisting in on-site evaluation and inspection of nuclear plants. Work also includes participating in the review and evaluation of proposals for facilities' redesign and improvement to assure effective utilization and the attainment of safety requirements. Work is assigned on a site-basis or an individual-safeguard basis. Work is reviewed by a higher-level engineer for completeness, technical accuracy, and soundness of approach.

EXAMPLES OF WORK: Participates in evaluation of nuclear facilities' design, construction, operation, and decommissioning to ascertain whether they meet Federal and State safety requirements.

Participates in Federal inspections of nuclear facilities to assure that all

applicable requirements are being met.

Participates in educating the public about nuclear safety.

Reviews and evaluates industry and Federal reports pertaining to safety or environmental impacts of nuclear facilities to ascertain whether the design, construction, operation, and decommissioning of these facilities provide reasonable assurance of public health and safety.

Participates in the review and application for Federal permits and licenses for the construction, operation, alteration, and decommissioning of nuclear facilities affecting the Commonwealth.

Prepares reports, letters, and memos relating to the ability of nuclear facilities and systems to operate in a manner so as to protect public health and safety.

Provides consultation and assistance to other agency staff in the development and functioning of nuclear facility emergency plans. Provides assistance to the legal staff on matters of nuclear safety and environmental impact of nuclear facilities.

Travels to and from worksite.

Performs related work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of diverse aspects of design, construction, operation, and decommissioning of nuclear facilities.

Knowledge of environmental and safety issues related to nuclear facilities of their associated fuel cycles.

Knowledge of fundamental nuclear engineering specialities such as steady state and transient nucleonics, thermal hydraulic response and

heat transfer, fission processes and accompanying radiation, radiological processes and accompanying radiation, radiological and structural design aspects of nuclear facilities.

Ability to recognize and evaluate features of nuclear facilities which have an impact on plant safety and reliability; and to make recommendations regarding their acceptability in accordance with standard nuclear engineering practices.

Ability to understand the concepts behind laws, regulations, and standards in the broad field of nuclear energy.

Ability to read and write and communicate orally in English.

Ability to perform mathematical calculations at the GED 6 level.

Ability to read and interpret Federal rules and regulations.

Ability to read and interpret Commonwealth and Departmental administrative rules, regulations, policies, and procedures.

Ability to prepare and deliver presentations to public, State, and local officials.

MINIMUM EXPERIENCE AND TRAINING: A bachelor's degree with major course work in nuclear engineering.

or

Any equivalent combination of experience and training.

| Job Code | Pay Scale Group | Pay Scale Type | Bargaining Unit | Civil Service or Non-Civil Service | Executive Board Change | Last Change Effective |
|----------|-----------------|----------------|-----------------|------------------------------------|------------------------|-----------------------|
| 75400 | 05 | ST | B4 | C | 999-99 | 9/1/1994 |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

06/01/1989

75400

ENVIRONMENTAL TRAINEE

DEFINITION: This is training work in the field of Environmental Protection in the Department of Environmental Resources.

An employee in this class participates in on-the-job and formal training programs designed to develop the required knowledges, skills, and abilities necessary to develop professional proficiency in air pollution, solid waste, water quality, radiation, mining, or sanitation. Assignments are designed to develop an employee's technical and academic proficiency. Work assignments increase in scope and complexity as the employee gains technical proficiency in the work. Initially, the employee assists higher level specialists in the appropriate specialty in the performance of the inspections, investigations, enforcement, public relations, and consultation assignments. Once the employee demonstrates the ability to perform the work, specific assignments are given and the employee performs the work under the technical guidance of a higher level specialist or supervisor. Employees will be required to attend training courses to enhance technical knowledge of the technical and regulatory aspects of Environmental Protection. Work is reviewed in progress and upon completion by a professional superior for personal development, completeness, technical accuracy, and quality.

EXAMPLES OF WORK: Participates in on-the-job and formal training programs designed to develop the required knowledges, skills, and abilities necessary to perform work in Environmental Protection.

Participates in inspections of industrial plants, water treatment facilities, and other regulated facilities for toxic contaminants and other hazardous environmental conditions.

Assists with the maintenance of mechanical and electronic equipment that produce analyses of environmental conditions.

Participates in the collection of samples from water supply sources, eating and drinking facilities, sewage disposal systems, and in collecting chemical and bacteriological samples.

Determines violations of rules and regulations by comparing case data with rules and regulations, and recommends appropriate action.

Prepares case documentation in terms of violations, past case history, and problems encountered for field use or by legal staff.

Prepares Departmental Orders indicating violations discovered, control measures to be taken, required corrective action, or control devices to be installed, and time frame for its accomplishment.

Attends enforcement conferences to provide background data on cases, answers questions regarding cases, and assists in explaining Departmental Orders or Consent Order/Agreements.

Assist with investigations of complaints involving commercial or industrial contaminant sources.

Assist in reviewing applications and permits, for effect on water quality, erosion control, mining methods, and compliance with Environmental rules and regulations.

Reviews proposed plans and specifications to determine if they meet established rules and regulations, and recommends approval or disapproval.

Responds to emergency situations such as flood disasters by assisting in clean-up operations, setting up evacuation centers, and providing advice and assistance on vector control, sewage disposal, and water supply.

Prepares letters, memorandums, reports, and correspondence to exchange information with facility owners, governmental officials, supervisor and the public.

Researches files and case history to assist in gathering data for use in prosecution of cases.

Perform similar work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of the biological, chemical, and physical sciences related to environmental protection.

Knowledge of the basic methods and techniques utilized in the collection and analysis of environmental data.

Ability to learn the Department of Environmental Resources' rules, regulations, policies, and procedures governing environmental protection.

Ability to express ideas clearly and concisely in oral, written, and graphic form.

Ability to collect, organize, evaluate and present data in graphic and narrative form.

Ability to learn the procedures and techniques utilized in the documentation of violations.

Ability to learn the safety precautions required while conducting inspections and investigations.

Ability to meet with and secure the cooperation of facility operators, and the public during the conduct of investigations, inspections, and surveys.

Ability to learn the various procedures and techniques utilized in inspections of facilities, industries, earthmoving sites, mines and other areas involved in environmental protection.

Ability to establish effective working relationships with co-workers, supervisor, facility operators, and the public.

Ability to operator a motor vehicle.

Possession of eyesight and color perception to permit use of test equipment.

Possession of sufficient eye-hand coordination to permit use of test equipment.

Possession of sufficient physical stamina to permit carrying test equipment over long distances, walking through rough terrain, and working under adverse weather conditions.

MINIMUM EXPERIENCE AND TRAINING: A Bachelor's Degree with major course work in an appropriate physical or biological science or an closely related environmental field.

NECESSARY SPECIAL REQUIREMENT: Possession of a valid motor vehicle operator's license as issued by the Commonwealth of Pennsylvania.

| Job Code | Pay Scale Group | Pay Scale Type | Bargaining Unit | Civil Service or Non-Civil Service | Executive Board Change | Last Change Effective |
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| 14350 | 11 | ST | B3 | N | 999-99 | 11/1/1999 |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

10/04/1995

14350

DIRECTOR, BUREAU OF RADIATION PROTECTION

DEFINITION: This is professional managerial work directing the activities of the Bureau of Radiation Protection in the Department of Environmental Protection. The Bureau of Radiation Protection is responsible for the planning, development, implementation, coordination and evaluation of statewide programs involving radiation source regulation and inspection, environmental radiation monitoring, nuclear plant safety, emergency radiation planning and response, radon monitoring, and low-level radioactive waste disposal.

The employee in this class directs, through subordinate managers, the activities of a professional and technical staff engaged in a variety of duties involving the statewide radiation protection program. Work involves determining goals, objectives, and priorities for the radiation protection program; developing and implementing rules, regulations, policies, procedures, standards and guidelines to manage program activities; reviewing proposed legislation for possible impact on the program; and determining and preparing budgetary requests. An important aspect of the work is dealing with federal, state and local officials and special interest groups on sensitive or controversial program issues. Work is assigned in the form of broad goals and objectives, and the employee exercises considerable independent judgment in determining specific goals, objectives, and program priorities. Work is reviewed upon completion by the Deputy Secretary for Air, Recycling and Radiation Protection through reports and conferences for attainment of goals and objectives and overall program quality.

EXAMPLES OF WORK: Directs, through subordinate managers, the planning, development, implementation, coordination, and evaluation of the statewide radiation monitoring, regulation and control programs.

Directs the development of statewide policies, technical standards and procedures for permitting, monitoring, enforcement and technical assistance activities involving radiation protection programs.

Reviews and analyzes activity reports to determine work being performed, program trends, and program effectiveness.

Develops and prepares budget and rebudget requests.

Reviews proposed legislation for possible impacts on the radiation protection program and recommends whether the Department should support or oppose the legislation.

Plans and organizes work, assigns work, determines work priorities, sets goals, and reviews work performance.

Interprets rules, regulations, policies, procedures, standards, and

objectives of the organization or program for subordinates.

Provides advice to staff on unusual or difficult technical and managerial problems.

Provides advice and information to government officials, industry representatives, regional program staff, and the public regarding Departmental functions, programs, rules, regulations, policies and procedures.

Represents the bureau or deputate in dealings with federal officials and other Commonwealth agencies.

Develops and delivers speeches and presentations to special interest groups, legislators, media and the public on bureau programs.

Performs related work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of the Department of Environmental Protection and federal laws, rules, regulations, policies and procedures governing radiation protection.

Knowledge of the principles, methods and techniques utilized in radiation protection programs.

Knowledge of the applicable collective bargaining agreements.

Skill in the supervision of employees.

Ability to express ideas clearly and concisely, both orally and in writing.

Ability to read and interpret Commonwealth and Departmental administrative rules, regulations, policies, and procedures.

Ability to coordinate the work activities of the assigned programs and to resolve conflicts between the programs.

Ability to establish and maintain effective working relationships with associates, subordinates, public officials, special interest groups, industry representatives, and the public.

MINIMUM EXPERIENCE AND TRAINING: A Master s degree in an engineering or scientific field related to radiation protection or health physics, and nine years of professional experience in the radiation protection field. Four of the nine years of required experience must have included managerial and second-level supervisory experience;

or

Any equivalent combination of education and experience which affords the applicant the required knowledges, skills, and abilities, and includes a minimum of four years of managerial and second-level supervisory experience.

NECESSARY SPECIAL REQUIREMENT: This position may require licensure as a Professional Engineer by the Commonwealth of Pennsylvania, or a reciprocal jurisdiction, where there can be no exemption from such licensure as defined in Section 5, Exemption from Licensure, of the Engineer, Land Surveyor and Geologist Registration Law (as amended).

This position may require certification by the American Board of Health Physics.

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| <u>12490</u> | <u>10</u> | <u>ST</u> | <u>B5</u> | <u>C</u> | <u>999-99</u> | <u>11/1/1999</u> |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

05/01/1985
12490

NUCLEAR ENGINEERING SUPERVISOR

DEFINITION: This is supervisory professional work in the evaluation of design, construction, operation, and decommissioning of nuclear facilities within the Commonwealth.

An employee in this class plans, develops, and supervises a statewide program for the evaluation of the safety of nuclear facilities and coordinates this program with other radiation protection programs. Work involves travels in establishing standards and procedures for evaluation of nuclear facilities; assuring Commonwealth awareness and input into related matters affecting nuclear facilities and the nuclear fuel cycle; advising and consulting with representatives of professional and key groups and regulatory agencies, such as the U.S. Nuclear Regulatory Commission, on matters relating to nuclear facilities and the nuclear fuel cycle. Work also involves assigning work; reviewing work performance; evaluating employees' performance; preparing and signing employees' Performance Evaluation Reports; interviewing and recommending employee selection; receiving and resolving employee grievances and complaints; approving leave requests; evaluating training needs of subordinates; and demonstrating more efficient work

methods to subordinates. Work is assigned in the form of broad program goals and objectives, and the employee exercises considerable freedom in determining specific goals and objectives and program priorities. Freedom to act is limited only by broad Departmental policy, administrative directives, and appropriate State and Federal laws. Work is reviewed upon completion by a professional superior through reports and conferences for attainment of program goals and objectives, completeness, and overall program quality.

EXAMPLES OF WORK: Plans, develops, and supervises a statewide program for the evaluation of safety of nuclear facilities and coordinates this program with other State radiation protection programs.

Reviews proposed laws and regulations for possible impact on nuclear energy safety and recommends changes if necessary.

Evaluates employees' work performance; prepares and signs employees' Performance Evaluation Reports.

Receives grievances and complaints, conducts initial investigation into cause and conditions, discusses with employees, and resolves or recommends solutions to grievances and complaints.

Approves leave requests and reviews subordinates' sick leave usage to determine if patter of abuse exists; maintains leave requests.

Exercises technical supervision and review over a staff of nuclear engineers who are assigned responsibility for review of specific nuclear facilities.

Coordinates the efforts of committees and consultants as necessary for

required
analysis in various program phases.

Establishes standards and procedures for review, evaluation, and inspection of nuclear facilities.

Assures Commonwealth awareness and input into related matters affecting nuclear facilities and nuclear fuel cycle.

Provides technical consultation and recommendations concerning policy decisions to the appropriate Commonwealth officials on nuclear-related matters.

Advises and consults with representatives of professional and key groups and regulatory agencies, such as the U.S. Regulatory Commission, on matters relating to nuclear facilities and the nuclear fuel cycle.

Develops and evaluates training programs for nuclear engineering staff.

Supervises the participation in interactions between his staff and Federal regulators and applicants for Federal permits and licenses for the construction, operation, alteration, and decommissioning of nuclear facilities affecting the Commonwealth.

Participates in the efforts of nuclear engineering community toward optimizing nuclear system safety and toward the furtherance of public education in matters of nuclear safety.

Prepares, reviews, and evaluates reports in relating to the ability of nuclear facilities and systems to operate in a manner so as to protect public health and safety.

Provides consultation and assistance to other agency staff in the

development
and functioning of nuclear facility emergency plans.

Provides expert testimony and assistance to legal staff in proceedings relating to matters of safety or environmental impact of nuclear facilities.

Travels to and from worksites.

Performs related work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of the techniques utilized in evaluating nuclear production facilities.

Knowledge of Federal rules and regulations concerning design, construction, and operation of nuclear facilities.

Knowledge of diverse aspects of design, construction and operation of decommissioning of light water reactors.

Knowledge of divers aspects of other environmental and safety issues related to nuclear facilities or their associated fuel cycles.

Knowledge of the fundamental nuclear engineering specialties, such as steady state and transient nucleonics, thermal hydraulic response and heat transfer, fission processes and accompanying radiation, in addition to associated mechanical, radiological, structural design aspects of nuclear facilities.

Skill in the supervision of employees.

Ability to recognize and evaluate features of nuclear facilities which have an impact on plans safety and reliability; and to make responsible recommendations regarding their acceptability as per good nuclear engineering practices.

Ability to establish and maintain effective working relationships with

associates; counterparts in various Federal agencies and agencies of other states; counterparts in the industry sector; professional and non-professional groups and organizations; and the general public.

Ability to understand the concepts behind laws, regulations, and standards in the broad field of nuclear energy.

Ability to plan and direct a statewide program for nuclear facility evaluation.

Ability to read and write and communicate orally and in English.

Ability to perform mathematical calculations at the GED 6 level.

Ability to read and interpret Federal rules and regulations.

Ability to plan, organize, and assign work to subordinate engineers.

Ability to evaluate employees' performance and prepare employee Performance Evaluation Reports.

Ability to read and interpret collective bargaining unit contracts applicable to the work performed by the unit.

Ability to read and interpret Commonwealth and Departmental administrative rules, regulations, policies and procedures.

Ability to evaluate employee training needs and request further education and training for subordinates.

Ability to supervise work activities of subordinate engineers effectively.

Ability to prepare and deliver presentations to public officials.

MINIMUM EXPERIENCE AND TRAINING: Seven years of responsible experience in

nuclear system safety analysis and a Master's degree with major course work in nuclear engineering;

or

Nine years of responsible experience in nuclear system safety analysis and a Bachelor's degree with major course work in an appropriate engineering or science field.

or

Any equivalent combination of experience and training.

NECESSARY SPECIAL REQUIREMENT: Certain positions in this class will require licensure as a professional engineer by the Commonwealth of Pennsylvania, or a reciprocal jurisdiction. These are positions where there can be no exemption from such licensure, as defined under Section 5, Exemption from censure, of the Professional Engineers Registration Law (as amended).

| Job Code | Pay Scale Group | Pay Scale Type | Bargaining Unit | Civil Service or Non-Civil Service | Executive Board Change | Last Change Effective |
|----------|-----------------|----------------|-----------------|------------------------------------|------------------------|-----------------------|
| 14340 | 10 | ST | B3 | C | 619-23 | 10/1/2001 |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

02/02/1998

14340

RADIATION PROTECTION PROGRAM MANAGER

DEFINITION: This is professional and managerial work directing a radiation protection program area in the Department of Environmental Protection.

An employee in this class serves as a regional program manager for the radiation protection program or as a division manager in central office. Work involves planning, developing, coordinating, implementing and evaluating program activities within the assigned area of responsibility. In a regional office, work involves directing the monitoring and control of radiation sources and radon within a large geographical area of the Commonwealth. In central office, work involves directing the statewide radon program or the statewide radiation control program. Work requires coordinating the activities of the assigned units with other organizational units; determining goals, objectives and priorities; and evaluating the effectiveness of the regional or statewide program. Work also involves developing, implementing or recommending changes to regulations, policies and procedures; reviewing proposed legislation for possible impact on the assigned program; and determining and preparing budgetary requests for the program. Work is assigned in the form of broad program goals and objectives, and is reviewed by the bureau director or regional director through reports and conferences for attainment of goals and objectives and overall program quality and effectiveness.

EXAMPLES OF WORK: In central office, serves as a division manager by directing the planning, development, coordination, implementation and evaluation of the statewide radiation control or radon program.

In a regional office, serves as a regional radiation protection program manager by directing the regulation of radioactive materials programs and radiation producing equipment and protective facilities to ensure compliance with Commonwealth and federal regulations governing radiation protection.

Establishes program priorities and objectives to ensure that program goals are met.

Directs and assists in emergency response activities involving accidents and incidents at nuclear power reactors in the Commonwealth and adjacent states, and participates in exercises and drills at nuclear power reactors.

Conducts or directs special studies on new methods of evaluating and controlling radiation hazards.

Assists in the formulation of regulations and proposed legislation for the control of radiological health hazards.

Represents the agency, bureau or regional office in dealing with federal officials and other Commonwealth agencies.

Negotiates and administers contracts with the federal government dealing with special projects in the field of radiological health.

Evaluates the inspection and compliance activities of field offices to ensure statewide uniformity.

Advises and consults with representatives of management, professional groups and regulatory agencies, such as the US Nuclear Regulatory Commission, on matters relating to radiation control.

Makes presentations to scientific and technical organizations and at public meetings concerning issues related to radon and radiation protection.

Employees in this class may participate in the performance of their subordinates' work consistent with operational or organizational requirements.

Operates a motor vehicle to travel to various work sites.

Performs similar work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of radiation health physics.

Knowledge of radiation protection principles and current practices related to the recognition, control and elimination of radiation hazards.

Knowledge of state and federal laws, regulations, policies and procedures governing radiation protection.

Knowledge of methods and techniques used in the collection and analysis of radiological data.

Knowledge of radioactive waste disposal techniques and procedures.

Knowledge of the procedures and techniques used in investigating complaints involving exposure to, or high levels of, radiation.

Skill in the supervision of employees.

Ability to communicate effectively, both orally and in writing.

Ability to determine the appropriate level of enforcement required to encourage or compel compliance with Departmental rules and regulations.

Ability to independently conduct, or direct the conduct of, special studies on new methods of evaluating and controlling radiation hazards.

Ability to negotiate effectively with federal government officials and facility operators on important and sensitive issues affecting the radiation protection program.

Ability to develop and deliver effective presentations and training sessions for a wide range of audiences, including Departmental staff, facility operators, industry groups, government officials, consultants, special

interest groups and the public.

Ability to establish and maintain effective working relationships with coworkers, facility operators, industry groups, legislators, government officials, consultants, special interest groups and the public.

Ability to operate a motor vehicle.

MINIMUM EXPERIENCE AND TRAINING: Two years as a Radiation Protection Program Supervisor;

or

Seven years of professional experience in the recognition, evaluation and control of radiation hazards, including a minimum of two years of supervisory experience in the recognition, evaluation and control of radiation hazards, and a bachelor's degree with major coursework in the physical, biological or radiological sciences or in engineering, with a minimum of 20 college credits in the physical sciences, engineering or mathematics;

or

Certification as a health physicist by the American Board of Health Physics, and two years of supervisory experience in the recognition, evaluation and control of radiation hazards;

or

Any equivalent combination of experience and training.

A master's degree in health physics, radiation science, nuclear engineering or a closely related field may be substituted for one year of professional experience in the recognition, evaluation and control of radiation hazards, provided the requirement for a minimum of two years of supervisory experience in the recognition, evaluation and control of radiation hazards is met.

A doctoral degree in health physics or a closely related field may be substituted for two years of professional experience in the recognition, evaluation and control of radiation hazards, provided the requirement for a minimum of two years of supervisory experience in the recognition, evaluation and control of radiation hazards is met.

NECESSARY SPECIAL REQUIREMENT: Certain positions in this class may require possession of a valid Pennsylvania driver's license.

| Job Code | Pay Scale Group | Pay Scale Type | Bargaining Unit | Civil Service or Non-Civil Service | Executive Board Change | Last Change Effective |
|----------|-----------------|----------------|-----------------|------------------------------------|------------------------|-----------------------|
| 14330 | 09 | ST | B5 | C | 619-22 | 10/1/2001 |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

04/30/1999

1433

RADIATION PROTECTION PROGRAM SUPERVISOR

DEFINITION: This is professional and supervisory work involving the monitoring and control of radiation sources and radon in a regional office, or managing a statewide radiation protection program in the central office of the Department of Environmental Protection.

An employee in this class supervises a professional staff in a regional office engaged in a variety of duties to ensure compliance with state and federal laws, regulations, policies and procedures governing radiation protection, or serves as a section manager in central office responsible for directing professional staff in the planning, development, implementation and evaluation of an important component of the Commonwealth's radiation protection program. Work involves providing direction, guidance and training to subordinates and evaluating their performance. In a regional office, work includes determining inspection and investigation priorities and directing emergency response activities. In the central office, areas of statewide program responsibility may include radon certification, radon monitoring, radioactive material licensing, environmental surveillance, emergency response or the registration and licensing of radiation producing equipment. Work requires coordinating the activities of the assigned unit with other organizational units; determining specific program goals, objectives and priorities; evaluating and improving the effectiveness of the assigned program; developing, implementing or recommending changes to regulations, policies and procedures; and reviewing proposed legislation for possible impact on the assigned program. Work is assigned in the form of program goals and objectives, and the employee exercises considerable freedom in determining the specific goals, objectives and program priorities. Work is reviewed by a regional program manager or division manager through reports and conferences for attainment of goals and objectives and overall program quality and effectiveness.

EXAMPLES OF WORK: Serves as a program supervisor for the radiation protection program in a regional office or in the central office.

Supervises a professional staff in a regional field operations office by directing and coordinating the x-ray and accelerator safety programs or the radioisotopes safety and special projects programs.

Establishes performance standards for subordinates in the conduct of inspections and investigations.

Reviews reports prepared by subordinates for compliance with procedures, policies and regulations.

Directs and assists in emergency response activities involving accidents and incidents at nuclear power reactors in the Commonwealth and adjacent states, and participates in exercises and drills at nuclear power

reactors.

Leads special or emergency surveys in response to accidents or incidents involving radioactive materials.

Participates in the development of statewide and/or regional policies and procedures involving the radiation protection program.

Reviews and interprets plans and specifications of the most complex radiological installations.

Directs the certification of individuals and firms providing radon-related services to the public, including testing, laboratory analysis and mitigation services; supervises inspections of certified facilities; and enforces civil penalties as needed.

Directs the statewide radon monitoring program, including providing training to central office and regional office staff, providing diagnostic services on unusually difficult radon problems in residential and commercial structures, conducting surveys of areas with high radon activity, and supervising the development of public information services to increase awareness of radon issues.

Directs the licensing program for the use of naturally-occurring and accelerator-produced radioactive material; writes, issues and signs licenses with all necessary items and conditions; develops license guides and program policies and procedures; and analyzes the effectiveness of the program through the review of radioactive material inspection reports.

Directs the statewide registration of x-ray equipment and vendors of machines which produce ionizing radiation.

Directs the licensing of medical and industrial accelerators.

Supervises the development of guidance to assist licensees and registrants in complying with radiation regulations, and provides consultative support to field staff on the interpretation of policies and regulations.

Plans, establishes and directs the environmental radiation surveillance program throughout the Commonwealth and around nuclear power plants and other facilities, including the collection of samples and analysis of data for inclusion in annual reports.

Plans, develops and implements the statewide radiation emergency response program and serves as the bureau's liaison with other federal and state agencies on emergency planning issues.

Plans and organizes work, assigns work, determines workflow and reviews work performance.

Prepares and signs employee performance review reports.

Interviews prospective employees and recommends employee selection or ranks applicants in terms of preferability for employment.

Receives grievances and complaints, conducts initial investigation into causes and conditions, discusses with employee, and resolves or recommends solutions to grievances and complaints.

Interprets rules, regulations, policies, standards, and objectives of the organization or program to subordinates.

Receives, reviews and approves or disapproves leave requests.

Provides training, consultation and assistance to subordinate personnel, other department personnel, and to industry and professional groups.

Makes presentations to scientific and technical organizations and at public meetings concerning issues related to radon and radiation protection.

Employees in this class may participate in the performance of their subordinates' work consistent with operational or organizational requirements.

Operates a motor vehicle to travel to various work sites.

Performs related work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of radiation health physics.

Knowledge of radiation protection principles and current practices related to the recognition, control and elimination of radiation hazards.

Knowledge of state and federal laws, regulations, policies and procedures governing radiation protection.

Knowledge of methods and techniques used in the collection and analysis of radiological data.

Knowledge of radioactive waste disposal techniques and procedures.

Knowledge of the procedures and techniques used in investigating complaints involving exposure to, or high levels of, radiation.

Ability to learn to supervise employees effectively.

Ability to communicate effectively, both orally and in writing.

Ability to determine the appropriate level of enforcement required to encourage or compel compliance with Departmental rules and regulations.

Ability to independently conduct, or direct the conduct of, special studies on new methods of evaluating and controlling radiation hazards.

Ability to negotiate effectively with federal government officials and facility operators on important and sensitive issues affecting the radiation protection program.

Ability to develop and deliver effective presentations and training sessions for a wide range of audiences, including Departmental staff, facility operators, industry groups, government officials, consultants, special interest groups and the public.

Ability to establish and maintain effective working relationships with coworkers, facility operators, industry groups, legislators, government officials, consultants, special interest groups and the public.

Ability to operate a motor vehicle.

MINIMUM EXPERIENCE AND TRAINING: Two years as a Radiation Health Physicist 2;

or

Five years of professional experience in the recognition, evaluation and control of radiation hazards, and a bachelor's degree with major coursework in the physical, biological or radiological sciences or in engineering, with a minimum of 20 college credits in physical sciences, engineering or mathematics;

or

Certification as a health physicist by the American Board of Health Physics;

or

Any equivalent combination of experience and training.

A master's degree in health physics, radiation science, nuclear engineering or a closely related field may be substituted for one year of professional experience in the recognition, evaluation and control of radiation hazards.

A doctoral degree in health physics or a closely related field may be substituted for two years of professional experience in the recognition, evaluation and control of radiation hazards.

NECESSARY SPECIAL REQUIREMENT: Certain positions in this class may require possession of a valid Pennsylvania driver's license.

Certain positions in this class may require current certification in mammography issued by the US Food and Drug Administration.

| Job Code | Pay Scale Group | Pay Scale Type | Bargaining Unit | Civil Service or Non-Civil Service | Executive Board Change | Last Change Effective |
|----------|-----------------|----------------|-----------------|------------------------------------|------------------------|-----------------------|
| 14320 | 08 | ST | B4 | C | 622-13 | 5/3/1999 |

Click on Job Code for current expanded information, on Pay Scale Type for current Pay Scale Type, on Civil Service or Non-Civil Service to obtain the Evaluation Guide (if available), on Executive Board Change to obtain the Executive Board amendment listed and on Last Change Effective to obtain history.

05/03/1999

143

RADIATION HEALTH PHYSICIST 2

DEFINITION: This is advanced professional work in the monitoring and control of radiation sources in the Department of Environmental Protection.

An employee in this class independently inspects complex radiation producing equipment and radioactive materials programs in a regional office, or independently performs a variety of duties in support of a major statewide radiation protection program in the central office. At this level, inspection work is characterized by equipment and programs with acute impact, either potential or actual, on human health and safety; extensive training and/or experience required to perform the inspections; and independent decision making and professional judgment in resolving technical issues at inspection sites. Complex radiation producing equipment includes but is not limited to computerized tomography, therapy simulators, therapy units, angiography units, accelerators, field radiography, electron beam welders and irradiators. Complex radioactive materials programs include but are not limited to diagnostic nuclear medicine, broad licenses, industrial radiography, nuclear pharmacies and facilities that manufacture devices containing radioactive material. Employees at this level may lead or participate in team inspections of complex facilities or demonstrate specialized inspection techniques to coworkers. In the central office, areas of program responsibility may include radon certification, radon monitoring, radioactive material licensing, x-ray equipment registration, accelerator licensing, environmental monitoring, emergency response planning and radioactive waste oversight. In both central and regional office settings, work may include developing regulations, policies, procedures and technical guidance documents; serving as agency site representatives at facilities undergoing decontamination or decommissioning; or performing compliance and performance inspections of radon mitigation firms and radon laboratories. Work is assigned in the form of objectives and priorities, and employees exercise judgment in planning, scheduling and completing assignments within the limits of program policies, guidelines, and state and federal regulations. Work is reviewed by a professional supervisor for the attainment of objectives, completeness, technical accuracy and overall quality.

EXAMPLES OF WORK: Performs advanced professional work in radiation health physics in a regional office or in the central office.

Independently conducts inspections of complex radiation producing equipment and radioactive materials programs in medical and industrial settings for compliance with program requirements.

Leads a team of health physicists during inspections of large industrial or medical facilities with radioactive materials programs and/or numerous and complex radiation sources and conducts exit interviews with facility

administrators.

Conducts investigations involving acute internal and/or external radiation exposure to determine causes and preventative measures.

Prepares reports to document the results of inspections and studies, and makes decisions or recommendations on compliance issues.

Responds to radiation emergencies and contamination incidents involving known or unknown radiation sources and materials, makes decisions on the type of analysis to be conducted or testing procedures to be used, and recommends contamination cleanup procedures.

Monitors the decontamination of radioactively contaminated areas by responsible parties or their contractors; reviews site-specific work plans; conducts special surveys relating to facility decontamination/decommissioning activities, plans and procedures; and makes recommendations to improve radiological safety operations or practices.

Inspects firms that mitigate or perform laboratory analyses for radon to determine compliance with regulations and certification requirements.

Directs the radon laboratory and testing inspection program by developing inspection procedures and protocols, training regional staff in conducting inspections, and auditing regional inspection programs.

Operates the department's radon charcoal counting facility, performs quality assurance checks and system calibrations, and conducts analyses of test results.

Reviews applications for radon testing, mitigation and laboratory certification and provides recommendations to supervisor concerning approval or disapproval.

Designs and directs the environmental surveillance program at a nuclear reactor or other large radioisotope facility.

Oversees the reporting, data collection and data analysis requirements of the federal Nuclear Regulatory Commission cooperative agreement on the monitoring of radiation levels around nuclear power plants.

Develops, compiles and produces the Annual Report of Environmental Radiation for the Commonwealth to report on the results of the statewide environmental surveillance program.

Reviews applications for the registration of x-ray equipment and vendors of machines that produce ionizing radiation.

Reviews applications for the licensing of medical and industrial particle accelerators, and prepares draft licenses for review and approval by the supervisor.

Evaluates complex applications for radioisotope licenses and recommends approval or disapproval, with additional conditions to impose upon the licensee if necessary.

Develops and implements components of the statewide radiation emergency response program and serves as the state's emergency response liaison with a number of nuclear power plants.

Monitors, tracks and reports on the generation, storage, transportation and disposal of radioactive waste and answers technical questions from the regulated community and the public.

Develops or participates in the development of statewide regulations, policies, procedures and technical guidance documents for the radiation protection program.

Provides advice and guidance to field staff and interprets state regulations as they apply to unusual or abnormal circumstances encountered during inspections.

Conducts or participates in special studies on new methods of evaluating and controlling radiation hazards.

Makes presentations to scientific and technical organizations and at public meetings concerning issues related to radon and radiation protection.

Participates as a member of a radiation emergency response team during incidents and exercises.

Operates a motor vehicle to travel to various work sites.

Performs similar work as required.

REQUIRED KNOWLEDGES, SKILLS, AND ABILITIES: Knowledge of radiation health physics.

Knowledge of radiation protection principles and current practices related to the recognition, control and elimination of radiation hazards.

Knowledge of state and federal laws, regulations, policies and procedures governing radiation protection.

Knowledge of the methods and techniques used in the collection and analysis of radiological data.

Knowledge of radioactive waste disposal techniques and procedures.

Knowledge of the procedures and techniques used in investigating complaints involving exposure to, or high levels of, radiation.

Ability to conduct surveys and investigations to locate, identify and mitigate radiation hazards and radon problems.

Ability to operate, calibrate and perform routine preventative maintenance on radiation and radon detection equipment and environmental sampling equipment.

Ability to communicate effectively, both orally and in writing.

Ability to determine the appropriate level of enforcement required to encourage or compel compliance with Departmental rules and regulations.

Ability to organize and lead inspections of complex radiation producing equipment and facilities.

Ability to plan, develop, organize and evaluate a major component of the statewide radiation protection program.

Ability to conduct or participate in special studies on new methods of evaluating and controlling radiation hazards.

Ability to develop and deliver effective presentations and training sessions for a wide range of audiences, including Departmental staff, facility operators, industry groups, government officials, consultants, special interest groups and the public.

Ability to establish and maintain effective working relationships with coworkers, facility operators, industry groups, legislators, government officials, consultants, special interest groups and the public.

Ability to operate a motor vehicle.

MINIMUM EXPERIENCE AND TRAINING: One year as a Radiation Health Physicist 1;

or

Three years of professional experience in the recognition, evaluation and control of radiation hazards, and a bachelor's degree with major coursework in the physical, biological or radiological sciences or in engineering, with a minimum of 20 college credits in physical sciences, engineering or mathematics;

or

Certification as a health physicist by the American Board of Health Physics;

or

Any equivalent combination of experience and training.

A master's degree in health physics, radiation science, nuclear engineering or a closely related field may be substituted for one year of professional experience in the recognition, evaluation and control of radiation hazards.

A doctoral degree in health physics or a closely related field may be substituted for two years of the required professional experience in the recognition, evaluation and control of radiation hazards.

NECESSARY SPECIAL REQUIREMENT: Certain positions in this class may require possession of a valid Pennsylvania driver's license.

Certain positions in this class may require current certification in mammography issued by the US Food and Drug Administration.

4.6.2

For the Formal Qualification Plan please see Section 4.4 for the PA version of Inspection Manual Chapter 1246 (AKA, Qualification Journals)

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection

November 16, 2006
717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: Terry W. Derstine
Radiation Protection Program Manager
SERO Office

FROM: David J. Allard, CHP, Director 
Bureau of Radiation Protection

I have reviewed your education, work experience, formal training, and on-the-job training. Based on this information and under section 11 (exceptions) of IMC 1246, I grant you an exemption and deem you grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo, once signed, shall take the place of your qualification journal for Radioactive Material Inspector.

cc: DEP BRP CO Personnel files

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: Robert C. Maiers, Chief
Decommissioning and Surveillance Division
Central Office

FROM: David J. Allard, CHP, Director
Bureau of Radiation Protection



I have reviewed your education, work experience, formal training, and on-the-job training. Based on this information and under section 11 (exceptions) of IMC 1246, I grant you an exemption and deem you grandfathered as a Decommissioning Inspector and Project Manager/Technical Reviewer in the Agreement State Program. This memo, once signed, shall take the place of your qualification journal for Decommissioning Inspector and Project Manager/Technical Reviewer.

cc: DEP BRP CO Personnel files

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection

November 16, 2006
717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: L. Ray Urciuolo
Radiation Protection Program Manager
Central Office

FROM: David J. Allard, CHP, Director
Bureau of Radiation Protection



I have reviewed your education, work experience, formal training, and on-the-job training. Based on this information and under section 11 (exceptions) of IMC 1246, I grant you an exemption and deem you grandfathered as a Materials License Reviewer in the Agreement State Program. This memo, once signed, shall take the place of your qualification journal for Materials License Reviewer.

cc: DEP BRP CO Personnel files

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006

717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: Stephen E. Williams
Radiation Protection Program Manager
Southcentral Office

FROM: David J. Allard, CHP, Director 
Bureau of Radiation Protection

I have reviewed your education, work experience, formal training, and on-the-job training. Based on this information and under section 11 (exceptions) of IMC 1246, I grant you an exemption and deem you grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo, once signed, shall take the place of your qualification journal for Radioactive Material Inspector.

cc: DEP BRP CO Personnel files

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: James G. Yusko
Radiation Protection Program Manager
Southwest Regional Office

FROM: David J. Allard, CHP, Director
Bureau of Radiation Protection



I have reviewed your education, work experience, formal training, and on-the-job training. Based on this information and under section 11 (exceptions) of IMC 1246, I grant you an exemption and deem you grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo, once signed, shall take the place of your qualification journal for Radioactive Material Inspector.

cc: DEP BRP CO Personnel files

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

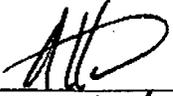
November 16, 2006
412-442-4000

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: James G. Yusko
Radiation Protection Program Manager
Southwest Regional Office

I have reviewed the education, work experience, formal training, and on-the-job training of Dennis L. Angelo. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo once signed shall take the place of his qualification journal for Radioactive Material Inspector.



11/16/06
APPROVED _____ DISAPPROVED
DATE

cc: DEP BRP CO Personnel files
Dennis L. Angelo, Chief, X-Ray Section, SWRO

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
484-250-5950

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: Terry W. Derstine
Radiation Protection Program Manager
Southeast Regional Office

I have reviewed the education, work experience, formal training, and on-the-job training of David A. Gaisior. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo once signed shall take the place of his qualification journal for Radioactive Material Inspector.



11/16/06

APPROVED _____ DISAPPROVED _____
DATE

cc: DEP BRP CO Personnel files
David A. Gaisior, Chief, X-Ray Section, SERO

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: L. Ray Urciuolo
Radiation Protection Program Manager
Central Office

I have reviewed the education, work experience, formal training, and on-the-job training of Ronald J. Hamm. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Materials License Reviewer in the Agreement State Program. This memo once signed shall take the place of his qualification journal for Materials License Reviewer.



11/16/06

APPROVED _____ DISAPPROVED
DATE

cc: DEP BRP CO Personnel files
Ronald J. Hamm, Chief, Licensing Section, Radiation Control Division, CO

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection

November 16, 2006
717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: Robert C. Maiers, Chief
Decommissioning and Surveillance Division
Central Office

I have reviewed the education, work experience, formal training, and on-the-job training of Tonda L. Lewis. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Decommissioning Inspector and Project Manager/Technical Reviewer in the Agreement State Program. This memo once signed shall take the place of her qualification journal for Decommissioning Inspector and Project Manager/Technical Reviewer.



11/16/06

APPROVED _____ DISAPPROVED _____
DATE

cc: DEP BRP CO Personnel files
Tonda L. Lewis, Chief, Environmental Surveillance Section,
Decommissioning and Surveillance Division, CO

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
484-250-5950

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: Terry W. Derstine
Radiation Protection Program Manager
Southeast Regional Office

I have reviewed the education, work experience, formal training, and on-the-job training of Joseph A. Pryber. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo once signed shall take the place of his qualification journal for Radioactive Material Inspector.



11/16/06

APPROVED _____ DISAPPROVED _____
DATE

cc: DEP BRP CO Personnel files
Joseph A. Pryber, Chief, Radioactive Materials Section, SERO

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
412-442-4000

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: James G. Yusko
Radiation Protection Program Manager
Southwest Regional Office

I have reviewed the education, work experience, formal training, and on-the-job training of Dwight A. Shearer. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Decommissioning Inspector and Project Manager/Technical Reviewer and Radioactive Material Inspector in the Agreement State Program. This memo once signed shall take the place of his qualification journal for Decommissioning Inspector and Project Manager/Technical Reviewer and Radioactive Material Inspector.


_____ APPROVED _____ DISAPPROVED
11/16/06 _____
DATE

cc: DEP BRP CO Personnel files
Dwight A. Shearer, Chief, Radioactive Materials Section, SWRO

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection

November 16, 2006
717-787-2480

SUBJECT: Agreement State Program Interim Qualification

TO: Dwight A. Shearer, Chief, Radioactive Materials Section,
Southwest Regional Office
James G. Yusko, Radiation Protection Program Manager,
Southwest Regional Office
Joseph A. Pryber, Chief, Radioactive Materials Section,
Southeast Regional Office
L. Ray Urciuolo, Chief, Radiation Control Division, Central Office
Robert C. Maiers, Chief, Decommissioning and Surveillance Division,
Central Office
Ronald J. Hamm, Chief, Licensing Section, Radiation Control Division,
Central Office
Stephen E. Williams, Radiation Protection Program Manager,
Southcentral Regional Office
Terry W. Derstine, Radiation Protection Program Manager,
Southeast Regional Office
Tonda L. Lewis, Chief, Environmental Surveillance Section,
Decommissioning and Surveillance Division, Central Office

FROM: David J. Allard, CHP, Director
Bureau of Radiation Protection



Given the Bureau's imminent NRC Agreement State status, the following individuals are granted interim qualification in the areas listed below. This does not alleviate the obligation under any qualification journal for any of these individuals. All individuals listed are to make every effort to complete their qualification journal requirements prior to September 30, 2008, or the first IMPEP review, whichever comes first.

Per the newly adopted DEP Inspection Manual Chapter 1246, interim qualification allows these individuals to fully perform duties within specific areas under the direction of a qualified individual. Managers and supervisors addressed to above are qualified in their respective areas.

Materials License Reviewer (I)

Smalls, Charley M.
Wilson, Scott L.

Radioactive Material Inspector (II)

Craig, Bridget M.
Croll, Richard F.
Dworsak, Gerald R.
Finney, Aleta L.
Gardosik, Andrew T.
Kitzer, Roy G.
Koshy, Joseph A.
Martin, Meredith May
McElwain, Delvy J.
Peffer, Frank J.
Rittiger, Christopher L.
Rutzmoser, Kurt H.
Woods, Roy V.

Decommissioning Inspector and Project Manager/Technical Reviewer (IX)

Chippo, John S.
Ott, Christopher A.
Rittiger, Christopher L.
Werner, Bryan R.
Whitehead, Jeffrey L.
Woods, Roy V.

cc: Benjamin Seiber, DEP BRP CO
Carla Hoffman, DEP BRP CO
Employee Training File

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection

November 16, 2006

717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: James G. Yusko
Radiation Protection Program Manager
Southwest Regional Office

FROM: David J. Allard, CHP, Director
Bureau of Radiation Protection

I have reviewed your education, work experience, formal training, and on-the-job training. Based on this information and under section 11 (exceptions) of IMC 1246, I grant you an exemption and deem you grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo, once signed, shall take the place of your qualification journal for Radioactive Material Inspector.

cc: DEP BRP CO Personnel files

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006

717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: Terry W. Derstine
Radiation Protection Program Manager
SERO Office

FROM: David J. Allard, CHP, Director
Bureau of Radiation Protection

I have reviewed your education, work experience, formal training, and on-the-job training. Based on this information and under section 11 (exceptions) of IMC 1246, I grant you an exemption and deem you grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo, once signed, shall take the place of your qualification journal for Radioactive Material Inspector.

cc: DEP BRP CO Personnel files

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006

717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: Stephen E. Williams
Radiation Protection Program Manager
Southcentral Office

FROM: David J. Allard, CHP, Director
Bureau of Radiation Protection

I have reviewed your education, work experience, formal training, and on-the-job training. Based on this information and under section 11 (exceptions) of IMC 1246, I grant you an exemption and deem you grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo, once signed, shall take the place of your qualification journal for Radioactive Material Inspector.

cc: DEP BRP CO Personnel files

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection

November 16, 2006
717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: Robert C. Maiers, Chief
Decommissioning and Surveillance Division
Central Office

FROM: David J. Allard, CHP, Director
Bureau of Radiation Protection

I have reviewed your education, work experience, formal training, and on-the-job training. Based on this information and under section 11 (exceptions) of IMC 1246, I grant you an exemption and deem you grandfathered as a Decommissioning Inspector and Project Manager/Technical Reviewer in the Agreement State Program. This memo, once signed, shall take the place of your qualification journal for Decommissioning Inspector and Project Manager/Technical Reviewer.

cc: DEP BRP CO Personnel files

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006

717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: L. Ray Urciuolo
Radiation Protection Program Manager
Central Office

FROM: David J. Allard, CHP, Director
Bureau of Radiation Protection

I have reviewed your education, work experience, formal training, and on-the-job training. Based on this information and under section 11 (exceptions) of IMC 1246, I grant you an exemption and deem you grandfathered as a Materials License Reviewer in the Agreement State Program. This memo, once signed, shall take the place of your qualification journal for Materials License Reviewer.

cc: DEP BRP CO Personnel files

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
412-442-4000

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: James G. Yusko
Radiation Protection Program Manager
Southwest Regional Office

I have reviewed the education, work experience, formal training, and on-the-job training of Dwight A. Shearer. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Decommissioning Inspector and Project Manager/Technical Reviewer and Radioactive Material Inspector in the Agreement State Program. This memo once signed shall take the place of his qualification journal for Decommissioning Inspector and Project Manager/Technical Reviewer and Radioactive Material Inspector.

_____ APPROVED _____ DISAPPROVED
_____ DATE

cc: DEP BRP CO Personnel files
Dwight A. Shearer, Chief, Radioactive Materials Section, SWRO

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
484-250-5950

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: Terry W. Derstine
Radiation Protection Program Manager
Southeast Regional Office

I have reviewed the education, work experience, formal training, and on-the-job training of Joseph A. Pryber. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo once signed shall take the place of his qualification journal for Radioactive Material Inspector.

_____ APPROVED _____ DISAPPROVED
_____ DATE

cc: DEP BRP CO Personnel files
Joseph A. Pryber, Chief, Radioactive Materials Section, SERO

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: L. Ray Urciuolo
Radiation Protection Program Manager
Central Office

I have reviewed the education, work experience, formal training, and on-the-job training of Ronald J. Hamm. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Materials License Reviewer in the Agreement State Program. This memo once signed shall take the place of his qualification journal for Materials License Reviewer.

_____ APPROVED _____ DISAPPROVED
_____ DATE

cc: DEP BRP CO Personnel files
Ronald J. Hamm, Chief, Licensing Section, Radiation Control Division, CO

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006

717-787-2480

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: Robert C. Maiers, Chief
Decommissioning and Surveillance Division
Central Office

I have reviewed the education, work experience, formal training, and on-the-job training of Tonda L. Lewis. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Decommissioning Inspector and Project Manager/Technical Reviewer in the Agreement State Program. This memo once signed shall take the place of her qualification journal for Decommissioning Inspector and Project Manager/Technical Reviewer.

_____ APPROVED _____ DISAPPROVED
_____ DATE

cc: DEP BRP CO Personnel files
Tonda L. Lewis, Chief, Environmental Surveillance Section,
Decommissioning and Surveillance Division, CO

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
484-250-5950

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: Terry W. Derstine
Radiation Protection Program Manager
Southeast Regional Office

I have reviewed the education, work experience, formal training, and on-the-job training of David A. Gaisior. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo once signed shall take the place of his qualification journal for Radioactive Material Inspector.

_____ APPROVED _____ DISAPPROVED
_____ DATE

cc: DEP BRP CO Personnel files
David A. Gaisior, Chief, X-Ray Section, SERO

**COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection**

November 16, 2006
412-442-4000

SUBJECT: Agreement State Program Grandfathered Qualification

TO: David J. Allard, CHP, Director
Bureau of Radiation Protection

FROM: James G. Yusko
Radiation Protection Program Manager
Southwest Regional Office

I have reviewed the education, work experience, formal training, and on-the-job training of Dennis L. Angelo. Based on this information and under Section 11 (exceptions) of IMC 1246, I recommend that he be granted an exemption and grandfathered as a Radioactive Material Inspector in the Agreement State Program. This memo once signed shall take the place of his qualification journal for Radioactive Material Inspector.

_____ APPROVED _____ DISAPPROVED
_____ DATE

cc: DEP BRP CO Personnel files
Dennis L. Angelo, Chief, X-Ray Section, SWRO

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Office of Waste, Air and Radiation Management
Bureau of Radiation Protection

November 16, 2006

717-787-2480

SUBJECT: Agreement State Program Interim Qualification

TO: Dwight A. Shearer, Chief, Radioactive Materials Section,
Southwest Regional Office
James G. Yusko, Radiation Protection Program Manager,
Southwest Regional Office
Joseph A. Pryber, Chief, Radioactive Materials Section,
Southeast Regional Office
L. Ray Urciuolo, Chief, Radiation Control Division, Central Office
Robert C. Maiers, Chief, Decommissioning and Surveillance Division,
Central Office
Ronald J. Hamm, Chief, Licensing Section, Radiation Control Division,
Central Office
Stephen E. Williams, Radiation Protection Program Manager,
Southcentral Regional Office
Terry W. Derstine, Radiation Protection Program Manager,
Southeast Regional Office
Tonda L. Lewis, Chief, Environmental Surveillance Section,
Decommissioning and Surveillance Division, Central Office

FROM: David J. Allard, CHP, Director
Bureau of Radiation Protection

Given the Bureau's imminent NRC Agreement State status, the following individuals are granted interim qualification in the areas listed below. This does not alleviate the obligation under any qualification journal for any of these individuals. All individuals listed are to make every effort to complete their qualification journal requirements prior to September 30, 2008, or the first IMPEP review, whichever comes first.

Per the newly adopted DEP Inspection Manual Chapter 1246, interim qualification allows these individuals to fully perform duties within specific areas under the direction of a qualified individual. Managers and supervisors addressed to above are qualified in their respective areas.

Materials License Reviewer (I)

Smalls, Charley M.
Wilson, Scott L.

Radioactive Material Inspector (II)

Craig, Bridget M.
Croll, Richard F.
Dworsak, Gerald R.
Finney, Aleta L.
Gardosik, Andrew T.
Kitzer, Roy G.
Koshy, Joseph A.
Martin, Meredith May
McElwain, Delvy J.
Peffer, Frank J.
Rittiger, Christopher L.
Rutzmoser, Kurt H.
Woods, Roy V.

Decommissioning Inspector and Project Manager/Technical Reviewer (IX)

Chippo, John S.
Ott, Christopher A.
Rittiger, Christopher L.
Werner, Bryan R.
Whitehead, Jeffrey L.
Woods, Roy V.

cc: Benjamin Seiber, DEP BRP CO
Carla Hoffman, DEP BRP CO
Employee Training File

David J. Allard, CHP

PA DEP / BRP
PO Box 8469
Harrisburg, PA 17105-8469
717-787-2480
717-783-8965 (fax)

Education:

University of Massachusetts - Lowell, Lowell, MA
M.S., Radiological Sciences and Protection, 1984

State University of New York at Albany, Albany, NY
B.S., Environmental Sciences, 1977

Certification / Registration / Professional License:

American Board of Health Physics – Comprehensive Practice, 1988
National Registry of Radiation Protection Technologists, 1980

Relevant Employment History:

Pennsylvania, Department of Environmental Protection, Harrisburg, PA
1999 – Present

Director, Bureau of Radiation Protection

Responsible for statewide nuclear safety, radiological emergency response, x-ray, NARM, occupational and environmental radiation protection, decommissioning, radon, and low-level radioactive waste management programs. Experience includes the full range of licensing, inspection, LLRW and decommissioning activities with existing NARM and NRC licensees, including nine nuclear power reactors.

Allard Radiological Consultants, Inc., N. Chelmsford, MA
1996 – 1999

Principal / Medical Health Physicist

Responsible for government and commercial client support of various radiation protection programs, audits, training, radiation / x-ray surveys and shielding designs, expert witness, and radioactive waste management projects and tasks. Experience includes update of 10CFR835, event investigations, and the environmental and occupational radiation protection inspection and independent oversight of DOE's production, weapons, reactor, accelerator, D&D and environmental restoration facilities for EH-2.

Arthur D. Little, Inc., Cambridge, MA
1991 – 1996

Senior Consultant (Health Physicist)

Responsible for managing and supporting government and commercial client projects related to radiation protection programs and radioactive waste management at DOE, DOD and other facilities. Experience includes environmental and occupational radiation

protection inspection and independent oversight of DOE's production, weapons, reactor, accelerator, D&D and environmental restoration facilities for EH-2.

TGM Detectors, Inc., Waltham, MA

1985 – 1991

Vice President / Radiation Safety Officer (RSO)

Responsible for corporate radiation safety, employee training, gas-filled radiation detector design, engineering, testing, and business management. Experience includes oversight of facility alpha, beta, gamma, neutron sealed source program, and support of customer radiation monitoring instrumentation in the areas of health physics, down-hole well logging and fixed / portable nuclear gauges.

Nuclear Metals, Inc., Concord, MA

1981-1985

Supervisor of Health Physics

Responsible for plant occupational and environmental radiation protection programs related to uranium and thorium processing and fabrication, staff training, and low-level radioactive waste management. Experience includes complete environmental and occupational health physics program for a major fully integrated (i.e., UF4 – U metal – U alloy - machining) and NRC source material licensee.

Albany Medical Center, Albany, NY

1977-1981

Medical Health Physicist / Assistant RSO

Responsible for the hospital and college broad scope NY state license and radiation safety program related to x ray and radioactive material use, patient radiation dosimetry, and Instructor of Radiation Physics, Radiation Biology and Radioisotope Methodology. Experience includes a full range of sealed and unbound sources (i.e., from H-3 to U-238) used in research, clinical, nuclear medicine and therapy.

Professional Affiliations – full member of:

American Association of Physicists in Medicine

American Nuclear Society

Conference of Radiation Control Program Directors

Health Physics Society

Professional Activities:

Officer of the Health Physics Society, 2005 - present

Director of the Health Physics Society, 1996 -1999

Consultant to the IAEA, 1995 - present

Various AAPM, ANSI, ASTSWMO, CRCPD, HPS, IEEE, ISCORS, NCRP committees

Publications and Presentations on the Topics of:

- Tritium in Landfill Leachate
- Mammography Experiences in Pennsylvania

- Low-activity Waste Management in Pennsylvania
- New Pennsylvania Regulations and Guidance for Radiation Monitoring of Solid Waste
- The Commonwealth of Pennsylvania's Review, Regulatory Approach, and Actions Regarding the Practice of CT Screening
- Nuclear / Radiological Emergency Response and Homeland Security in Pennsylvania
- Health Physics Instrumentation for Emergency Response
- Radiation Protection in Medicine
- Decommissioning Experiences in Pennsylvania
- Quehanna D&D Project
- Cosmic Ray Doses to Airline Crew
- Analytical X-ray Equipment Surveys
- Radiation Protection Inspection and Auditing (16-hr short course)
- Fundamentals of Radiation Protection (40-hr short course)
- External Dosimetry Considerations Involving Operations with Uranium
- Characteristics of Aerosols Generated at a Depleted Uranium Metal Fabrication Facility
- Radioactivity in Zirconium Oxide Powders Used in Industrial Applications
- Re-evaluation of Scattered to Incident Exposure Ratios: Implications for Diagnostic X-Ray Shielding Design
- Radiation Safety Protocol for Analytical X-Ray Equipment
- Radiological Response Characteristics of Geiger-Mueller Tubes Commonly Used in Radiation Monitoring Instruments
- Revised ANSI Standard on Test Procedures for Geiger-Mueller Counters
- Staff Exposures with Cs-137 Brachytherapy
- Quality Assurance with Commercial Personnel Dosimetry

Full name with middle initial: Dennis L. Angelo
Work address: PA DEP/BRP SWRO
400 Waterfront Drive
Pittsburgh, PA 15222-4745
Work telephone: 412-442-4225
Work fax: 412-442-5246

Education/degree:
University, Location: Geneva College - Beaver Falls, PA
Degree, year: MS Organizational Leadership, 1999
University, Location: Slippery Rock University - Slippery Rock, PA
Degree, year: BS Secondary Education Science, 1974

Certification / Registration / Professional License: N/A

Relevant Employment History:

Employer: Commonwealth of Pennsylvania
Begin date – Present: 2/2001 to Present
Position/Title: Section Chief – X-Ray & Accelerators
Brief description of duties / Position Summary: Supervise the X-ray & Accelerator Section of the SWRO BRP that encompasses oversight of all activities in every area of x-ray and accelerator inspections, investigations and emergencies. Organize, design, and provide training seminars for the staff in areas of perceived deficiencies, and conduct strategic planning sessions to diagram short and long-term goals with the group as a whole, and the inspectors individually.

Employer: Commonwealth of Pennsylvania
Begin date – End date: 12/1985 – 2/2001
Position/Title: Radiation Health Physicist II
Brief description of duties / Position Summary: Inspect licensed and registered radiation sources and radioactive materials in Region V & VI. Consulted with and advised users and staff personnel on regulatory and safety procedures. Conducted and investigated inquiries and complaints from the public regarding actual or potential problems or concerns about radiation sources or radiation safety. Coordinated, researched, and published several papers on new medical procedures and their impact upon the human body, and made numerous public speaking presentations to public and national organizations across the nation.

Employer: Duquesne Light Company

Begin date – End date: 8/1983 – 9/1985

Position/Title: Radiation Control Foreman

Brief description of duties / Position Summary: Supervised and directed radiation control personnel in all phases and functions of radiation safety at normal, shut down, or emergency plant operations at the Beaver Valley Power Station (BVPS), Shippingport, PA. Staffed and managed teams of various sizes and responsibilities, and conducted continuous training on emergency preparedness for all subordinates.

Employer: Rad Services & Numanco

Begin date – End date: 4/1975 – 8/1983

Position/Title: Senior Radiation Health Physicist

Brief description of duties / Position Summary: Provided support in all phases of radiological safety of atomic power operations at both boiling water and pressurized water reactor facilities within the Eastern United States. Directed and participated in decommissioning and decontamination operations at several inactive sites, and in numerous emergency response drills. Member of the Rad Services initial emergency response and recovery team at Three Mile Island Atomic Power Station, Middletown, PA.

Relevant Military Experience: N/A

Professional Affiliations:

Conference of Radiation Control Program Directors, Inc. (CRCPD)

Health Physics Society (HPS)

Western Pennsylvania Chapter Health Physics Society (WPHPS)

Publications:

Exposure Rates Associated with High Level Fluoroscopic Equipment & Data Recording Modes, 1994, D.L. Angelo et.al

The Pennsylvania Computerized Tomography Study, 1996,

D.L. Angelo & J.P. Winston

Follow Up to the 1994 Pennsylvania High Level / Cine Fluoroscopic Study, 1997, D.L. Angelo et.al.

James F. Barnhart - Nuclear Emergency Response

Formal Accredited Education

Master of Science in Nuclear Engineering, The University of New Mexico, Albuquerque, New Mexico.
July 1995.

A 36 credit hour graduate program with thesis in the college of Chemical and Nuclear engineering. Some of the courses included nuclear reactor safety engineering, nuclear instrumentation theory, nuclear decontamination and decommissioning, particle interaction with materials physics, FORTRAN design coding for Monte-Carlo nuclear core and shielding computer modeling, and a 6 credit hour thesis. This degree was attained over a period of five years while working full time for DEP and an education leave.

Bachelor of Science in Environmental Resource Management, The Pennsylvania State University, University Park, PA. November 1976.

My undergraduate courses included 27 credit hours of physics (eight credits in senior level nuclear and atomic physics) and 24 credit hours of calculus and analytical geometry.

Training non-accredited

Pennsylvania State University World Campus GIS Certificate – June 2000
16 CEU credit GIS course using *Intergraph Geomedia 3.0*

Course: **ESRI Visual Basics Application (VBA) Programming for ESRI ArcGIS** - May 2003 5-day course

Course: **Applied Health Physics** - A 187 hour course given over a five-week period in September and October 1989. This was an intensive course in theoretical and applied health physics. Approximately one half of the course was theory and the other half was laboratory and field applications. This course was given at Oak Ridge Associated Universities, Oak Ridge, TN.

Course: **Probability Risk Assessment (PRA) for Boiling Water and Pressurized Nuclear Reactors.**

Nuclear Power and Radiation Employment Experience - 1985 to present

Since 1985, I have worked for the ***Bureau of Radiation Protection of the Pennsylvania Department of Environmental Protection (DEP)***. Before 1995 it was known as the Department of Environmental Resources (DER). I have been a Radiation Health Physicist since 1990 and before that a Radiation Protection Specialist. Since 1993 I have worked in the Division of Nuclear Safety. Before 1993, I worked in the radon program and special projects division. I have worked on several projects, some simultaneously. They are listed in the following categories.

Nuclear Emergency Plume Modeling and Emergency Response Experience - 2001 to present

Low Level Radioactive Waste Tracking and Relational Database Experience - 1995 to present

Quehanna Decontamination and Decommissioning Project - 1996 to 2000.

Predictive Methodology Development - 1994 to 1995

Radiation Instrumentation Computational Code Design - 1987 to 1993

General Nuclear Emergency Response Experience – 1989 to 2001

Low Level Radioactive Waste Experience (LLRW) – 1994 to 1998

James F. Barnhart - Nuclear Emergency Response

Acting Emergency Planning Coordinator 6/1995 - 12/1995

Special Nuclear Safety Projects

Saxton Nuclear Power Plant Decommissioning Survey - July to September 1990

Nuclear Material Transportation Risk and Tracking Codes.

Environmental Radiation - Radon 1985-1993

Peer Reviewed Published Papers

Spatial and Statistical Techniques for Identifying Regions with Elevated Radon Levels – thesis at University of New Mexico - Zimmerman Library

The Utilization of Geographic Information Systems in Nuclear Emergency Response in Pennsylvania- American Health Physics Society Mid-Year Conference January 2003

Bridget M. Craig

PA DEP/BRP

2 E. Main St

Norristown, PA 19401

484-250-5852

484-250-5951

Education

Master of Arts in Counseling Psychology, 2003
Immaculata College, Exton, PA

Bachelor of Science in Biology, 1992

Bachelor of Arts in Biology, 1981

Bloomsburg University, Bloomsburg, PA

University of Scranton, Scranton, PA, 1977-1979

Major: Biology

Relevant Employment History

PA Department of Environmental Protection, Norristown, PA
Environmental Protection Compliance Specialist, 2001-present

Air Quality Specialist, 1993-2001

Professional Affiliations

Conference of Radiation Control Program Directors

Richard F. Croll

PA DEP / SERO

2 East Main St

Norristown, PA 19401-4915

484-250-5848 / 570-895-4044

484-250-5951 (fax) / 570-895-4041 (fax)

Education

Thomas A. Edison State College, Trenton, NJ

B.S. Applied Science and Technology: Radiation Protection, 1992

Thomas A. Edison State College, Trenton NJ

A.S. Nuclear Engineering Technology, 1989

Certification / Registration / Professional License

National Registry Of Radiation Protection Technologists (inactive)

Relevant Employment HistoryPennsylvania, Department of Environmental Protection, Harrisburg, PA
2001 - Present

Radiation Health Physicist - 2

Conduct inspections of and provide assistance to facilities using x-ray producing machines, state regulated radioactive materials, radiation monitoring equipment at solid waste facilities and certified radon testers within the east portion of Pennsylvania. Previously assigned to Central Office RAM Licensing section, these duties included implementing the solid waste monitoring program, evaluation of radiological consequences of disposal on non-licensed RAM and administering the Department's TLD program.

Millennium Services, Inc.

2000 - 2001

Health Physicist

Temporary assignments at Maine Yankee, Connecticut Yankee and Susquehanna Nuclear Plants supporting radiological aspects of decommissioning and outage work.

GPU Nuclear Corp.

1986 – 1999

Engineering Associate

Assigned to OCNGS Decommissioning Planning, corp. Nuclear Safety and Engineering & Design Departments in various radiological related positions. Secretary and member of the Saxton NEC decommissioning oversight committee. Previously assigned to TMI-2 in Radiological Engineering, RadCon Field Operations supervisory and technician positions.

Relevant Military Experience

1972 - 1979

Mechanical Operator / Engineering Laboratory Technician, MO / ELT
Leading ELT onboard an operating SSBN. Previously ELT Instructor at an operating prototype

Professional Affiliations

BWROG Cobalt Reduction Committee, 1994 - 1996

B&WOG Dose Reduction Task Force, 1995 – 1996

EPEI Cobalt Reduction Guidelines Committee, 1989

Terry W. Derstine
2 E. Main Street
Norristown, PA 19401
484 250-5846
484 250-5951

Education/degree

The Pennsylvania State University, University Park, PA
Bachelor of Science Degree in Microbiology 1984 – 1988

Relevant Employment History

June, 1988 - Present

The Pennsylvania Dept. of Environmental Protection

Southeast Regional Office, Bureau of Radiation Protection

▪ *August, 2000 – Present*

- Radiation Protection Program Supervisor, Radioisotopes Safety and Special Projects Unit
 - Supervision of five employees and Program activities involving radioactive materials and other special projects

▪ *May, 1994 – August 2000*

- Radiation Health Physicist 2
 - Assess radiation safety programs, specializing in larger, more complex facilities, and functioning as lead inspector

▪ *October, 1992 – May, 1994*

- Radiation Health Physicist 1

▪ *June, 1989 – October, 1992*

- Radiation Protection Specialist

▪ *June, 1988 – June, 1989*

Radiation Protection Specialist Trainee

Professional Affiliations:

Associate member of the Conference of Radiation Control Program Directors (CRCPD).

Advisor to the CRCPD E-23 Committee on Resource Recovery and
Radioactivity

David A Gaisior

PA Department of Environmental Protection
Bureau of Radiation Protection
Southeast Regional Office
2 East Main Street
Norristown, PA 19401

Phone 484-250-5847
Fax 484-250-5951

Professional Experience

Nov. 1988 to Present

Commonwealth of Pennsylvania

Radiation Health Physicist for Pennsylvania Department of Environmental Protection.

Job duties:

Conduct MQSA inspections at FDA certified screening mammography facilities in the eastern region of Pennsylvania.

Inspect medical and dental X-ray units to assess compliance with state regulations regarding patient and operator safety.

Inspect hospital nuclear medicine departments to assess compliance with state regulations.

Perform follow-up radon gas measurements in private homes.

Answer questions from the public about radon and other radiation safety issues.

Operate, maintain, and calibrate various radiation and radon gas measuring equipment.

Design, maintain, and troubleshoot databases and spreadsheets used by myself and other office staff.

Aug. to Nov. 1988

Commonwealth of Pennsylvania

Chemistry Technician for Pennsylvania Department of Environmental Protection

Job duties:

Sample management - unpack and route incoming samples to correct lab areas for requested analyses.

Assist and/or relieve other lab personnel in sample analysis.

Jan. 1988 to June 1988

Mt. Union Area H.S. and Southern Huntingdon Area H.S.

Served as a substitute teacher on an as-needed basis in all secondary subject areas.

Sept. 1987 to Nov. 1987

Hollidaysburg Area Senior H.S.

Student teacher:

Served as a full time chemistry teacher. Taught four classes of introductory chemistry and one class of advanced chemistry. Responsibilities included course planning, lesson preparation & presentation, classroom control & discipline, student evaluation, and parent-teacher conferences.

Training / Education

March 8, 2003 **MTMI**
Multi-Detector / Multi-Slice CT Scanning seminar
New York, NY

Sept. 20 – 21, 2002 **MTMI**
Practical Implementation of Intensity Modulated Radiation Therapy seminar
Boston, MA

March 7 – 10, 2002 **Hahnemann University School of Medicine**
Dosimetry Symposium
Philadelphia, PA

Sept. 29 – 30, 2001 **MTMI**
Physics of Mammography course
Hyannis, MA

May 1 – 4, 2001 **NRC**
Performance-Based Inspection training
Rockville, MD

June 21 – 25, 1999 **NRC**
Transportation of Radioactive Materials training
Chattanooga, TN

March 1 – 3, 1999 **FDA**
MQSA Inspections Under the Final Regulations training
Gaithersburg, MD

Jan. 12 – 16, 1998 **NRC**
Internal Dosimetry training
King of Prussia

Sept. 22 – 26, 1997 **FEMA**
Radiological Emergency Response Operations training
Mt. Weather, VA

April 12 – 13, 1996 **Saint Francis Hospital**
Breast Seminar
Tulsa, OK

June 19 – 21, 1995 **DEP**
Negotiation Skills training (In-House)

Nov. 7 - 18, 1994 **FDA Centers for Devices and Radiological Health**
Mammography Quality Standards Act inspector training course III
(inspection procedures). Certified MQSA Mammography Inspector #2008
effective 10/1/94 thru 10/01/97.

April 11 - 15, 1994 **FDA Centers for Devices and Radiological Health**
Mammography Quality Standards Act inspector training course II
(physics of X-ray production and machine operation).

Dec. 13 - 16, 1993 **Rutgers University**
Radon Mitigation training

Aug. 31 - Sept. 4, 1992 **New York University**
Resident Radiologist Review (preparation for ABR Certification exam)

| | |
|-------------------------|---|
| | Radiation, Physics, and Biology |
| Feb. 24 - 28, 1992 | FEMA Advanced Radiological Accident Assessment (dose assessment) |
| Jan. 23 - 24, 1992 | Rutgers University Radon and Radon Decay Product Measurement |
| May 21 - 25, 1990 | FEMA Radiological Accident Assessment |
| Nov. 13 - 16, 1989 | Rutgers University Radon Mitigator Proficiency training course |
| March 2, 1989 | Rutgers University Radiation Instrumentation |
| Jan. 29 - Feb. 2, 1990 | FEMA Radiological Accident Assessment Planning |
| 1988 | Shippensburg University Completed 6 credits toward Master of Education in computer science. Terminated studies due to time conflicts with job. |
| Feb. 1988 to May 1988 | Huntingdon County Area Vocational-Technical School Completed a 300-hour TV troubleshooting & repair course. |
| 1986 - 1987 | Juniata College Received Pennsylvania state teacher certification in chemistry education. |
| Sept. 1986 to Dec. 1986 | Huntingdon County Area Vocational-Technical School Completed a 100-hour course on fundamentals of solid-state electronics. |
| 1981 - 1986 | Pennsylvania State University Initially physics major - changed to chemistry & science education. Received B.S. degree in secondary education. |
| 1981 | Mt. Union Area Junior/Senior High School Graduated - academic track |

Andrew T. Gardosik
PA DEP / BRP
909 Elmerton Ave.
Harrisburg, PA 17110
(717) 705-4895
(717) 705-4890 fax

Education

Penn State University – State College, PA
B.S. Environmental Sciences ; minor: Forest Science, 1992

Harrisburg Area Community College – Harrisburg, PA
A.A. Civil Engineering Tech.

Relevant Employment History

Pennsylvania, Department of Environmental Protection, Harrisburg, PA
Nov. 1992 – Present
Radiation Health Physicist

Responsible for performing radiation safety inspections at facilities that use radiation producing equipment and/or radioactive material. These inspections involve making detailed observations and measurements that require proficiency in the use of a variety of radiation detection field instrumentation. The inspection will determine compliance with applicable State and Federal regulations and licenses.

Other responsibilities include performing airborne environmental and occupational sampling and analysis in the field, and to provide assistance to the EOF and Assessment Center as needed during reactor emergencies at Three Mile Island and Peach Bottom.

Respond and investigate all inquiries concerning radiation from the public or registrants.

Provide emergency response to accidents involving radiation; provide assessment, and direct recovery operations as needed.

Employer

Begin date – End date

Position/Title

Brief description of duties / Position Summary
(Repeat in this format as necessary)

Relevant Military Experience

Begin date – End date

Position/Title

Last Duty Assignment and Major Command
Description of duties/Position Summary

Professional Affiliations

Publications

Ronald J. Hamm

PA DEP/BRP

PO Box 8469

Harrisburg, PA 17105-8469

717-783-5919

717-783-8965 (FAX)

Education

Divine Providence Hospital-

Radiologic Technology

Harrisburg Hospital-

Nuclear Medicine Technology

Certification/Registration/Professional Licensure

ARRT-Radiologic Technology

ARRT-Nuclear Medicine Technology

NMTCB-Nuclear Medicine Technology

ASCP-Nuclear Medicine Technology

Relevant Employment History

Pennsylvania, Department of Environmental Protection, Harrisburg, PA

2002-present

Chief, Radioactive Material Licensing

1997-2002

Radioactive Material Licensing

Responsible for evaluation of new license requests, amendment requests and license terminations to assure adherence to regulations in the Pa Code and CFR..

Divine Providence Hospital-Williamsport, PA

1985-1996

Administrative Director of Radiation Oncology, Medical Oncology, Nuclear
Medicine/RIA

Responsible for the daily operations of these areas including staffing, safety, marketing
and budgeting. Participated in Radiation Safety Committee meetings.

Divine Providence Hospital-Williamsport, PA

1971-1985

Chief Nuclear Medicine Technologist

Responsible for daily operations of department, scheduling patients, ordered radioactive
material, completed license amendment requests for Commonwealth and NRC.

Divine Providence Hospital-Williamsport, PA

1965-1967

Staff Radiologic Technologist

Performed daily radiography tasks

Relevant Military Experience

1967-1970

NCOIC-Radiology

San Vito Air Station, Italy

USAF Security Service

Responsible for daily operations of the Radiology Department

Professional Affiliations

American Registry of Radiologic Technologists

American Society of Radiologic Technologists

Society of Nuclear Medicine

CRCPD

4/27/05

Rich Janati
PADEP / BRP
P.O. Box 8469
Harrisburg, PA. 17105-8469
717-787-2163
717-783-8965 (fax)

EDUCATION

University of Pittsburgh - Pittsburgh, PA
M.S., Energy Resources and Technology, 1984

University of Massachusetts - Lowell, Lowell, MA
B.S., Nuclear Engineering, 1980

Relevant Employment History

Pennsylvania, Department of Environmental Protection, Bureau of
Radiation Protection, Harrisburg, PA

1994 - Present

Chief, Division of Nuclear Safety

Responsible for the overall implementation of the Commonwealth's
nuclear safety oversight, nuclear power plant emergency response
and low-level radioactive waste (LLRW) disposal programs.

Provides support to the department's secretary in her role as the
Chairman of the Appalachian States LLRW Compact Commission

Pennsylvania, Department of Environmental Protection, Harrisburg, PA
09/2002-06/2003

Acting Director, Bureau of Radiation Protection

Responsible for statewide nuclear safety and emergency response, X-
ray, occupational and environmental radiation protection,
decommissioning and radon programs, and LLRW management.

Pennsylvania, Department of Environmental Protection, Bureau of
Radiation Protection

1985-1984

Nuclear Engineer

Performed a general nuclear safety oversight review at the assigned
power plants, including frequent on-site interactions and
accompaniment of NRC resident and region based inspectors. Conducted
inspections of LLRW packaging and transportation activities at the
nuclear power plants and other major LLRW generators. Participated in
emergency exercises and drills at the assigned power plants to
maintain the ability to assess plant conditions during nuclear event
or emergencies.

Pennsylvania, Public Utility Commission, Bureau of Rates
1984-1985

Utility valuation Engineer

Performed comparative analysis of rate case elements, including fuel inventories, prices, materials and supplies, decommissioning expense estimates and accrual management. Developed data requests and interrogatories for submittal to the electric utilities.

Westinghouse Electric Corporation, Pittsburgh, PA
1981-1983

Nuclear Fuel Safety and Licensing Engineer

Participated in the nuclear fuel reload design for the assigned nuclear power plants and prepared the Reload Safety Evaluation reports. Participated in the utility presentations and the Nuclear Regulatory Commission meetings regarding Westinghouse fuel safety and licensing issues.

University of Massachusetts-Lowell, Lowell, MA
1980-1981

Research Assistant

Provided assistance in performing research in the areas of nuclear physics and nuclear engineering

PROFESSIONAL Affiliations

1. Conference of Radiation Control Program Directors (CRCPD)
3. Low-Level Radioactive Waste Forum, Inc.

PUBLICATIONS

1. Impact of Transportation Considerations in the Selection of LLRW Repositories, presented at the Second International Conference on Radioactive Waste Management.
2. Safety Issues Related to Disposal of I-129 in a LLRW Repository, presented at the Ninth Annual DOE Conference.
3. Safety Issues Related to the Disposal of C-14 in a LLRW Repository - A State Perspective, presented at the National Conference on Radiation Control.

R. Janati

RECORD OF TRAINING

| <u>COURSE TITLE</u> | <u>SPONSOR</u> | <u>DATE</u> |
|---|----------------|-------------|
| Radioactive Materials Transp. Emergency Response Orientation | DOE | 10/85 |
| BVPS Radioactive Waste Management | DLCO | 10/85 |
| BVPS Station Orientation Training | DLCO | 11/85 |

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|--|--------|-------|
| BVPS Radiation Workers Training | DLCO | 11/85 |
| BVPS Quality Control Training | DLCO | 11/85 |
| BVPS Licensed Operators Training | DLCO | 2/86 |
| Transportation of Radioactive Materials | NRC | 5/86 |
| Radiological Accident Assessment | FEMA | 7/86 |
| BVPS EP Training For Offsite Agencies | DLCO | 10/86 |
| BVPS Solid Waste and Process Control(PCP) Program | DLCO | 11/86 |
| BVPS General Employee and Radiation Workers Training | DLCO | 10/87 |
| Computer Training Enable OA | Pa DEP | 1/88 |
| Westinghouse Technical Managers Course | NRC | 2/88 |
| American Board of Health Physics Preparation | PSU | 6/88 |
| TMI Radiological and Environmental Assessment Coordinator Course | GPUN | 6/88 |
| TMI-1 Operators Training | GPUN | 7/89 |
| Computer-Enable Database | Pa DEP | 10/89 |
| Computer-Enable Tutorial | Pa DEP | 12/89 |
| TMI General Employee and Radiation Workers Training | GPUN | 4/90 |
| INEL Performance Assessment Computer Codes (PORFLO & PRESTO) | NLLWMP | 4/90 |
| TMI-1 Operators Training | GPUN | 6/90 |
| Computer-Enable Spreadsheet | Pa DEP | 9/90 |

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|--|--------|-------|
| TMI-1 Operators Training | GPUN | 8/90 |
| BVPS EP Training for Offsite Agencies | DLCO | 11/90 |
| Computer-Enable Graphics | Pa DEP | 1/91 |
| TMI EP Training for Offsite Agencies | GPUN | 4/91 |
| TMI General Employee and Radiation Workers Training | GPUN | 5/91 |
| Eberline (ESP-2) Instrument Training | Pa DEP | 5/91 |
| Fundamentals of Inspection | NRC | 10/90 |
| SSES EP Training for Offsite Agencies | PP&L | 11/91 |
| PP&L Fitness for Duty (FFD) Training for Supervisors | PP&L | 2/92 |
| Emergency Response Data System (ERDS) Training | NRC | 8/92 |
| PB Dose Calculation Model | PECO | 8/92 |
| Federal Radiological Emergency Response Plan (FRERP) | NRC | 9/92 |
| Team Building for Managers | Pa DEP | 10/92 |
| Risk Assessment & Communication | NLLWMP | 1/93 |
| Limatorque Motor Operated Valve (MOV) Training | GPUN | 1/93 |
| NRC Incident Investigation Team (IIT) Investigation at TMI | NRC | 2/93 |
| TMI General Employee and Radiation Workers Training | GPUN | 4/93 |
| American Disability Act (ADA) Training | Pa DEP | 7/93 |

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|--|--------|---------------------|
| BVPS EP Training for Offsite Agencies | DLCO | 8/93 |
| Advanced Radiological Accident Assessment Course | FEMA | 9/93 |
| Geographical Information System (GIS) Training | Pa DEP | 9/93 |
| SSES EP Refresher Training for Offsite Agencies | PP&L | 10/93 |
| TMI-2 Post Defueling Monitored Storage (PDMS)- Electrical, Ventilation, and Liquid Waste Disposal Systems Training | GPUN | 11/93 & 12/93 |
| BVPS General Employee and Radiation Workers Training | DLCO | 12/93 |
| Managing Diversity Workshop | Pa DEP | 12/93 |
| General Radiological Emergency Response Training | Pa DEP | 2/94 |
| PP&L Fitness For Duty (FFD) Retraining For Supervisors | PP&L | 2/94 |
| TMI General Employee and Radiation Workers Training | GPUN | 4/94 |
| Susquehanna (SSES) Dose Projection Training | PP&L | 4/94 |
| TMI Dose Projection Training | GPUN | 4/94 |
| Safety Program | Pa DEP | 6/94 |
| Conflict Management | Pa DEP | 6/94 |
| Risk Management | ACURI | 8/94 |
| Duke University strategic Leadership Program | Pa DEP | 9/94 |
| BRP Orientation Training | Pa DEP | 10/94 |
| Project Management Training | Pa DEP | 1/95 |

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|---|------------------|-------|
| TMI Dose Projection Training | GPUN | 3/95 |
| NRC Emergency Response Training | NRC | 5/95 |
| Computer Training-Microsoft Word | Pa DEP | 7/95 |
| Workshop Design/Meeting Leadership | Pa DEP | 8/95 |
| Risk Communications | NLLWMP | 10/95 |
| NRC Training on 10 CFR Part 71-Transportation Regulations | NRC | 2/96 |
| Computer Training - Power Point | Pa DEP | 3/96 |
| Understanding Communities | GJS & Associates | 4/96 |
| Computer Training-Microsoft Excel | | 10/96 |
| How to Survive a Public Hearing | Battelle/NLLWMP | 5/97 |
| Sandman Risk Communications Training | NLLWMP | 4/98 |
| Managing for Government Responsiveness | Pa DEP | 5/98 |
| Pollution Prevention Integration Project | Pa DEP | 6/98 |
| EPA Sponsored Training on Protective Action Guidelines (PAG's) | EPA | 8/98 |
| Pollution Prevention Assessment Training | Pa DEP | 8/98 |
| GPU Nuclear Training on Emergency Action Levels | GPUN | 11/98 |
| NRC Region 1 Training on the New NRC Inspection and Oversight Program | NRC | 4/00 |

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|--|------------|-------|
| ERDS Refresher Training | NRC | 9/00 |
| PRA for Technical Managers | NRC | 6/01 |
| Radiological Emergency Pre- Paredness Exercise Evaluation | FEMA | 12/01 |
| Spokesperson Training | PADEP | 4/02 |
| Valuating and managing a Diverse Workforce | PADEP | 6/02 |
| Expectations For Inspectors | NRC | 9/03 |
| Leadership Awareness | PADEP | 7/03 |
| Advanced Radiation Safety | EPA | 8/03 |
| Prevention of Sexual Harassment | DEP | 6/04 |
| Emergency Response Organization (ERO)Requalification Training | Exelon | 8/04 |
| NRC Response Technical Manual (RTM) | NRC | 9/04 |
| PA Radiological Assistance Program (PARAP) | PEMA/PADEP | 11/04 |
| Advisory Committee Database Training | PADEP | 12/04 |

CONFERENCES AND WORKSHOPS

| | | |
|--|--------|-------|
| Effective English Workshop | US OPM | 1/85 |
| MORT-Accident/Incident Investigation Workshop | EG&G | 11/86 |
| LLRW Project Management QA/QC Workshop | EG&G | 4/88 |
| NRC Workshop on Systems and | NRC | 4/92 |

Components Operability

| | | |
|---|--------|-------|
| NRC Regulatory Information Conference | NRC | 7/92 |
| Emergency Preparedness Executive Seminar | GPUN | 9/92 |
| NRC Regulatory Information Conference | NRC | 5/93 |
| Total Quality Management Workshop | NLLWMP | 7/93 |
| NRC National State Liaison Officers' Meeting | NRC | 9/93 |
| Managing Diversity Workshop | Pa DEP | 12/93 |
| Radiation Protection Managers Workshop | NRC | 12/93 |
| LLW-Host State Technical Coordinating Committee (TCC) Meeting | NLLWMP | 4/94 |
| NRC Regulatory Information Conference | NRC | 5/94 |
| ACURI Annual Meeting | ACURI | 8/94 |
| NRC Performance Assessment Workshop | NRC | 10/94 |
| LLW-Host State TCC Meeting | NLLWMP | 12/94 |
| NRC Workshop on Performance Assessment | NRC | 12/94 |
| LLW-Host State TCC Meeting | NLLWMP | 12/94 |
| DOE Annual LLW Conference | DOE | 12/94 |
| CRCPD Workshop on Licensing and Regulation of LLRW | CRCPD | 4/95 |
| LLW-Host State TCC Meeting | NLLWMP | 5/95 |

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| NRC Regulatory Information Conference | NRC | 5/95 |
| LLW-Host state TCC Meeting | NLLWMP | 8/95 |
| CRCPD Workshop on Licensing and Regulation of LLRW (storage) | CRCPD | 8/95 |
| LLW-Host State TCC Meeting | NLLWMP | 12/95 |
| DOE Annual LLW Conference | DOE | 12/95 |
| CRCPD Workshop on LLRW Licensing and Regulations-Tour of Barnwell | CRCPD | 3/96 |
| Host State TCC Meeting | NLLWMP | 4/96 |
| CRCPD Workshop on Licensing and Regulation of LLRW | CRCPD | 3/96 |
| Host State TCC Meeting | NLLWMP | 10/96 |
| CRCPD Workshop on Licensing and Regulation of LLRW | CRCPD | 10/96 |
| Host State TCC Meeting | NLLWMP | 2/97 |
| CRCPD Workshop on Licensing and Regulation of LLRW | CRCPD | 3/97 |
| NRC Regulatory Information Conference | NRC | 4/97 |
| Host State Technical Coordinating Committee (TCC) Meeting | NLLWMP | 5/97 |
| DOE Annual Conference | NLLWMP | 5/97 |
| Radiation Workshop | Pa DEP | 11/97 |
| NRC Regulatory Information Conference | NRC | 4/98 |
| National Radiological Emergency Preparedness Conference | REP | 4/98 |
| LLW Forum | Forum | 5/98 |

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|--|------------|-----------------|
| NEI Workshop on Nuclear Plant Decommissioning and License Renewal | NEI | 7/98 |
| EPA Workshop on Radiological Post- Emergency Response Issues | EPA | 9/98 |
| LLW Forum Meeting | Forum | 9/98 |
| EPA Workshop on Mixed Waste | EPA | 10/98 |
| Water Reactor Safety Information Meeting | NRC/NRR | 10/98 |
| Host State Technical Coordinating Committee Meeting | NLLWMP | 11/98 |
| DOE Annual LLW Meeting | DOE | 11/98 |
| LLW Forum Meeting | Forum | 2/99 |
| CRCPD Workshop for LLRW Regulators | CRCPD | 9/99 |
| ACURI Annual Meeting | ACURI | 10/99 |
| LLW Forum Meeting | Forum | 10/99 |
| HP Society Meeting | HP Society | 10/99 |
| NRC Workshop on the New Inspection And Oversight Program | NRC | 1/00 |
| Radioactive Waste Management Conference | | 2/00 |
| FEMA Region III REP Community Meeting | FEMA | 2/00 |
| LLW Forum Meeting | Forum | 3/00 |
| NRC Workshop on the Revised New Inspection and Oversight Program | NRC | 3/00 |
| Solid Waste & Waste Minimization Workshop | PADEP | 6/00 |
| ACURI Annual Meeting | ACURI | 9/00 |
| Solid Waste & Waste Minimization Workshop | PADEP | 10/00& 11/00 |

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|--|-----------|-------|
| NRC Reactor Oversight Initial Implementation Panel Meeting | NRC/IIEP | 2/01 |
| NRC New Reactor Oversight Public Workshop | NRC | 3/01 |
| NRC Regulatory Information Conference | NRC | 3/01 |
| NRC ACRS Meeting on MOX Fuel and High Burn-up Fuel | NRC/ACRS | 4/01 |
| NRC Workshop on Advanced Reactors | NRC/ACRS | 6/01 |
| NRC Annual Research Conference | NRC | 10/01 |
| Radioactive Waste Management Conference | Industry | 02/02 |
| NRC Regulatory Information Conference | NRC | 03/02 |
| LLW Forum Meeting | LLW Forum | 03/02 |
| PEMA Annual Radiological Officers Workshop | PEMA | 09/02 |
| LLW Forum Meeting | LLW Forum | 03/03 |
| NRC Regulatory Information Conference | NRC | 04/03 |
| LLW Forum Meeting | LLW Forum | 09/03 |
| NRC Annual Research Conference | NRC | 10/03 |
| LLW Forum Meeting | LLW Forum | 09/04 |
| NRC Annual Research Conference | NRC | 10/04 |
| Waste Management Conference | Industry | 02/05 |
| NRC Regulatory Information Conference | NRC | 03/05 |
| LLW Forum Meeting | LLW Forum | 03/05 |

Full name with middle initial: Roy G. Kitzer
Work address: 909 Elmerton Avenue, Harrisburg, Pa. 17110
Work telephone: 717 705-4893
Work fax: 717 705-4890

Education/degree (most recent first)
University: MS Radiation Science- Rutgers; BS Ch. Eng.- Carnegie Tech
Degree, year: 1966; 1956

Certification / Registration / Professional License

Relevant Employment History

Employer: DEP/RPP
Begin date – 1963-1964 & 1996-2005
Position/Title: HP II
Brief description of duties / Position Summary
PADEP – Inspection Compliance, Radon, NORM; LLRW

Employer: Westinghouse Nuclear Service Division
Begin date – End date: 1964-1996
Position/Title: Manager IH&S & RSO
Brief description of duties / Position Summary
Manager Radsafe, Industrial Hygiene, Safety; RSO for Large Broad
Materials NRC License; LLRW Generator & ACURI Board

Relevant Military Experience: US Coast Guard
Begin date – End date: 1957-1965 - Reserves
Position/Title: Seaman II
Last Duty Assignment and Major Command: Cape May, NJ
Description of duties/Position Summary: Basic and Critical Skills Exemption

Professional Affiliations: Previous - HPS, AIHA, NSC

Publications - None

Joseph A. Koshy
2 East Main St
Norristown, PA 19401
(484) 250-5836
(484) 250-5951(fax)

Education

M.S., Physics
Kerala University, India
1987

Certification / Registration / Professional License

Associate Member of CRCPD

Relevant Employment History

Pennsylvania Department of Environmental Protection

1994 – Present

Health Physicist - II

Perform inspections to verify compliance with the Commonwealth of Pennsylvania radiological rules and regulations for the eastern area of state. Perform inspections to verify safe use of isotopes or subject to be licensed by Commonwealth. Perform inspections at accelerator facilities.

Tonda L. Lewis
Evan Press Building P.O. 1467 Harrisburg, PA
Phone: 717 783-8541
Fax: 717 783-1114

Bachelors Degree
PSU – University Park, PA
1987

Relevant Employment History

Commonwealth of PA/Dept. Env. Protection

Feb 2000 - Present

Radiation Protection Program Supervisor

Brief description of duties / Position Summary - Directs and coordinates the environmental monitoring programs around PA nuclear facilities. Supervises the field operations of section staff in; collection of samples; submission for analysis, review and reporting of results.

Serves as RSO in complying with Department's USNRC byproduct material license.

Participates in Emergency Response exercises.

Commonwealth of PA/Dept. Env. Protection

Nov. 1992 - May 1995

Radiation Health Physicist 2

Brief description of duties / Position Summary - Reviewed analysis results of environmental samples, communicated with nuclear utility contractors in resolution of data conflicts. Served as RSO in complying with Department's USNRC byproduct material license.

Participates in Emergency Response exercises.

Commonwealth of PA/Dept. Env. Resources

Nov. 1992 - May 1995

Radiation Health Physicist 1

Brief description of duties / Position Summary - Reviewed analysis results of environmental samples, communicated with nuclear utility contractors in resolution of data conflicts,

Participated in Emergency Response exercises. Assisted RSO in complying with Department's USNRC byproduct material license.

Commonwealth of PA/Dept. Env. Resources

April 1988 – Nov. 1992

Radiation Protection Specialist

Brief description of duties / Position Summary - Collected environmental samples for radiological analysis as part of environmental monitoring program around nuclear facilities. Scheduled calibrations and maintained air sampling equipment. Participated in nuclear

power station exercises as part of emergency response field teams. Assisted RSO in complying with Department's USNRC byproduct material license.

Robert C. Maiers
Bureau of Radiation Protection
Rachel Carson State Office Building
P.O. Box 8469
Harrisburg, PA 17105-8469
717-783-8979

Education

Associate in Engineering, Nuclear Engineering Technology, Pennsylvania State University, 1980

Bachelor of Science, Environmental Engineering Technology, Pennsylvania State University, 1992

Certification / Registration / Professional License

Professional Engineer, PE-047960E

Certified Wastewater Treatment Plant Operator, T3073 (all wastewater classes and subclasses)

Relevant Employment History

PA Dept. of Environmental Protection, Bureau of Radiation Protection

2001-present

As Chief of the Division of Decommissioning and Environmental Surveillance, manages and oversees statewide programs responsible for decommissioning nuclear facilities and environmental monitoring for operating nuclear facilities. Serves as the primary interface between the Department of Environmental Protection (DEP) and the Nuclear Regulatory Commission (NRC) for all decommissioning projects currently being remediated in Pennsylvania under NRC's authority. Responsibilities within the Bureau of Radiation Protection (BRP) include emergency response for radiological accidents. Within the emergency organization, is designated alternate Incident Manager in the BRP emergency plan for nuclear power plant accidents. Served the role of Incident Manager in graded Federal Emergency Management Agency (FEMA) exercises involving Pennsylvania nuclear power plants.

PA Dept. of Environmental Protection, Bureau of Radiation Protection,

1999-2001

As Decommissioning Section Chief, established the first Decommissioning Section in the Bureau of Radiation Protection. This involved hiring new staff and consultants and establishing training criteria, inspection procedures, and the establishment of regulations and policies regarding decommissioning. Coordinated meetings with the NRC and other agencies regarding decommissioning issues in Pennsylvania. Responsible for scheduling activities and exchanges of documents regarding decommissioning to ensure compliance with the Memorandum of Understanding (MOU) between the NRC and DEP dated July 15, 1996. This MOU provides the basis for cooperation between the two agencies to facilitate the safe and timely remediation and decommissioning of sites in Pennsylvania at which both agencies exercise regulatory authority.

PA Dept. of Environmental Protection, Bureau of Radiation Protection

1998-1999

As Acting Low-level Radioactive Waste Section Chief, supervised staff and managed a \$30 million contract for siting, construction, operation, and closure of a low-level radioactive waste disposal facility to be located in Pennsylvania. Managed activities associated with a state wide Community Action Plan that was designed for soliciting a community that would be willing to host a low-level radioactive waste disposal facility in Pennsylvania.

PA Dept. of Environmental Protection, Bureau of Radiation Protection

1992-1998

As a nuclear engineer in the Division of Nuclear Safety, performed nuclear safety oversight reviews and inspections of nuclear power plants in Pennsylvania and documented the results in monthly reports. . Responsible for the review and evaluation of licensee technical specification requests, review of and evaluation of plant operating reports, licensee event reports and NRC inspection reports.

Pennsylvania Power and Light, Nuclear Plant Engineering

1982-1992

As a Staff Analyst in the Nuclear Plant Engineering Instrumentation and Controls Section, was responsible for the design and use of instrument control valves used throughout the Susquehanna Steam Electric Station. Responsible for environmental and seismic qualification testing performed on solenoid valves used in safety related systems. Engineering responsibilities included design and installation of the meteorological monitoring and seismic monitoring systems for the Susquehanna plant. Prior to his promotion to Staff Analyst, worked in the Nuclear Operations Department as a nuclear plant operator and was involved in the preoperational testing for Emergency Core Cooling Systems and Reactor Control Systems for Susquehanna Unit 1.

Duquesne Power and Light, Shippingport Atomic Power Station

1980-1982

Trained as a nuclear plant operator/reactor operator for the Shippingport Atomic Power Station. Obtained a DOE security clearance and received classified training regarding the design and operation of a light water breeder reactor.

Delvy J McElwain

PA DEP/ Bureau of Radiation Protection/ SWRO
400 Waterfront Drive
Pittsburgh, PA 15222
Office: (412) 442 5824
Fax: (412) 442 5246

Education

Vanderbilt University, Nashville, TN
Nuclear Medicine Technology Certificate, 1973
Sterling College, Sterling KS
B.S. Physics/Math, 1972

Relevant Employment History

PA DEP/ Bureau of Radiation Protection
2002 - present
Radiation Health Physicist 2
Responsible for performing regulatory inspections of x-ray registrants and RAM licensees in DEP regions 5 & 6, emergency response, and D&D oversight.

Shadyside Hospital
1976- 2002
Nuclear Medicine Coordinator - Responsible for daily activities of nuclear medicine department. Monitor safe use and handling of all radio-pharmaceuticals. Comply with all NRC, JCAHO, OSHA, and State Regulations. performed nuclear imaging studies. Responsible for developing department budgets. Hiring and evaluating employee performance. Evaluate and make recommendations for capitol equipment.

Western Pennsylvania Hospital
1975 - 1976
Staff Nuclear Medicine Technician, Performed routine nuclear medicine procedures.

Delvy J McElwain cont.

Relevant Military Experience

US Army

1968 - 1970

Communication Sgt

Plieku, South Vietnam - In charge of all ground communication in company area.

Professional Affiliations

2002 - Conference of Radiation Control Program Directors, Inc.
Western Pennsylvania Chapter

Meredith M. Martin
2 E. Main Street
Norristown, PA 19401
Phone - 484 250-5835
Fax - 484 250-5951

Education/degree

Muhlenberg College, Allentown, PA
Bachelor of Science - 2002 - Environmental Science

Relevant Employment History

The Pennsylvania Dept. of Environmental Protection
Bethlehem District Office, Bureau of Waste Management

- *April, 2003 – April 2005*
 - Waste Management Specialist
Conducted field inspections and complaint investigations and performed related activities for subjects of the PA Solid Waste Management Act and other regulations addressing hazardous, municipal and residual waste. Encouraged proper waste management practices through public outreach and education.

- *April, 2005 – March 2006*
 - State Sanitarian
Conducted field inspections and performed related activities for subjects of the Safe Drinking Water Act. Contributed to flood emergency response through public outreach and education.

- *March 2006 – present*
 - Radiation Protection Specialist
Conduct field inspections and perform related activities for subjects of the PA Radiation Protection Act. Participate in NRC-led inspections of nuclear material licensees. Contribute to PA's development of NRC Agreement State status. Encourage safe radiological practices through public outreach and education.

Frank J. Pepper
PA DEP
309 N. 5th St., Ste D
Sunbury PA 17801
(570) 988-5570
(570) 988-5507 (FAX)

Bachelor of Science, 1991
Pennsylvania State University
University Park, PA 16801

Relevant Employment History

Commonwealth of PA, Department of Environmental Protection
March 1992 – Present
Radiation Health Physicist

Responsible for inspections of facilities using x-ray machines, radioactive materials, and particle accelerators operating under PA state regulations.

Joseph A. Pryber

PA DEP/BRP

2 E. Main St

Norristown, PA 19401

484-250-5842

484-250-5951

Education

Mercyhurst College- Erie, PA

B.A., Biology-Environmental Science, 1978

Relevant Employment History

Pennsylvania, Department of Environmental Protection, Norristown, PA

1990 – Present

Radiation Health Physicist

Plan and conduct inspections and investigations to verify compliance with state radiological rules and regulations for safe use of radioactive materials or x-ray equipment by medical, industrial and academic users. Plan and conduct inspections of mammography facilities under state contract with FDA. Respond to radiological incidents involving exposure to radiation or radioactive materials. Prepare reports of inspections and investigations to document findings and conclusions regarding conditions which have or may have an adverse effect on health and safety. Participate in emergency response exercises and activities for protection of public and environment. Respond to public inquiries regarding radiological concerns..

Gulf Nuclear, Inc., Webster, TX

Thermoluminescent Dosimetry Program Supervisor 1982-1988

Developed record keeping system, training program, customer reporting system, procedures manual, and quality assurance program to obtain and maintain accreditation by the National Voluntary Laboratory Accreditation Program. Served as acting Safety Services manager for over six months. Made sure regulations were met and documentation kept.

Laboratory Technician 1979-1982

Manufactured radioactive tracers and industrial radiography sources.

Analyzed leak tests and performed survey meter calibrations for customers.

Professional Affiliations

Conference of Radiation Control Program Directors

Christopher L. Rittiger

PA DEP/ Bureau of Radiation Protection/SWRO
400 Waterfront Drive
Pittsburgh, PA 15222
Office: (412) 442-4223
Fax: (412) 442-5246

Education:

Pennsylvania State University, University Park, PA
B.S. Biology, 1976

Relevant Employment History:

PA DEP/ Bureau of Radiation Protection
12/1985 - present
Radiation Health Physicist 2
Responsible for performing regulatory inspections of x-ray registrants and RAM licensees in DEP regions 5 & 6, emergency response, and D&D oversight.

Duquesne Light Co.
Beaver Valley Power Station – Unit 1
6/1980 – 6/1983
Reactor Operator
While In training to become an NRC licensed reactor operator, performed system valve alignments, operating surveillance testing on both primary and secondary side systems and other tasks necessary for reactor operations.

Professional Affiliations:

- 1997- Health Physics Society (National) and Western PA Chapter (Local)
McLean, VA 22101 and Pittsburgh, PA 15213
- 1997- Conference of Radiation Control Program Directors, Inc.
Western Pennsylvania Chapter

Kurt Rutzmoser

2371 Murray Avenue
Huntingdon Valley, Pa. 19006
(484) 250-5853 (W) (215) 947-8103 (H)

Work experience

1994 - Present

The Pennsylvania Department of Environment Protection

Bureau of Radiation Protection

Norristown, PA

Radiation Health Physicist.

- Inspect licensed radiological facilities and radiological safety programs for compliance with Commonwealth rules and regulations.
- Prepare reports of inspections and investigations, documenting findings and conclusions in regards to condition which adversely affect or may adversely affect health and safety.
- Participation in Emergency Response Drills to Nuclear Power Plants.

1992-1994

The Pennsylvania Department of Environment Protection

Bureau of Radiation Protection

Solid Waste Specialist.

Conshohocken, PA

- Reviewed compliance histories, environmental assessments, and financial assurances for the regional municipal, residual, and hazardous waste permit application process. Participated in field visits meetings with applicants, engineers, consultants, chemists, and hydro-geologists as necessary for the permitting process.
- Maintained records of insurance and bond documents of regional facilities for the purpose of coordinating with field inspectors to ensure compliance with departmental regulations
- Drafted reports and documents, coordinated information with Harrisburg, and provided testimony as a Departmental witness in legal proceedings.

Education

1969

Roberts Wesleyan College

North Chili, N.Y.

Bachelor of Science, General Science, minor Biology

Additional Experience-

- 1986-1992 Marketing Representative- Represented several major importers/manufactures serving the baking industry. Established and maintained over 250 accounts.
- 1973-1986 Manager of Family Corporate Business -Responsibilities included business administration, production, sales, scheduling, purchasing, hiring, payroll, records keeping, and product development.
- 1972-1973 High School Science Instructor- Conducted classes in biology, chemistry, physics, homeroom, and religious education. Additional teaching was done on a substitute basis (1981-1983).
- 1969-1972 United States Air Force-Served as a Commissioned Officer, Responsible for all vehicle assets on base and operation of vehicle maintenance facilities, command of 60 enlisted men. Served 3 years additional reserve duty, discharged at the rank of Captain.

Continuing Education and Training at DEP-

| | | | |
|------------|------|---|---|
| 8/22-8/26 | 1994 | Basic Radiological Health | University of Texas, San Antonio, Tx. |
| 8/14-8/18 | 1995 | Radiological Accident Assessment | FEMA, Emmitsburg, MD |
| 9/18-9/24 | 1995 | Post Plume Phase | FEMA, Emmitsburg, MD |
| 11/30 | 1995 | CT Training | Suburban General Hospital, Norristown, Pa. |
| 1/24 | 1996 | Nuclear Medicine | Presbyterian Hospital, Phila. Pa. |
| 2/1 | 1996 | Film Processing | Dupont - In office |
| 3/5 | 1996 | Transportation of Radioactive Material | NRC King of Prussia, Pa. |
| 5/29 | 1996 | Therapeutic Accelerator | Sacred Heart Hospital, Allentown, Pa. |
| 10/8 | 1996 | Cyclotron Demonstration | North Shore Hospital, New York, N.Y. |
| 1/12, 8/23 | 1995 | Computer Training | Sunrise Computer Learning Cente |
| 8/27-8/29 | 1996 | Computer Training | Sunrise Computer Learning Cente |
| 9/20-9/25 | 1998 | FEMA RERO Training | Berryville, VA |
| 1/12-1/16 | 1998 | Internal Dosimetry & Whole Body Counting | NRC King of Prussia, PA |
| 6/19-6/29 | 2000 | FDA Diagnostic X-Ray Coarse | San Francisco, CA |
| 8/14-8/18 | 2000 | Diagnostic & Therapeutic Nuc. Med. Coarse | Houston, TX |
| 4/23-4/25 | 2002 | Inspecting for Performance | NRC Rockville, MD |
| 3/11-3/14 | 2002 | Occupational & Environmental Rad. Prot. | Harvard, Boston MA |
| 4/15-4/19 | 2002 | Irradiator Technology | Montreal, Canada |
| 11/1-11/5 | 2004 | Radon Measurement and Mitigation | Rutgers, E. Brunswick NJ |

Dwight A. Shearer

PA DEP/ Bureau of Radiation Protection/SWRO
400 Waterfront Drive
Pittsburgh, PA 15222
Office: (412) 442-4223
Fax: (412) 442-5246

Education

University of Florida, Gainesville, FL
BS Environmental Engineering, 1994

Penn State University, University Park, PA
BS Chemistry, Sec. Ed, 1990

Professional Engineer License
PE056003

Relevant Employment History:

PA DEP/ Bureau of Radiation Protection/ SWRO
2001 – present

Section Chief - Radioactive Materials - The section covers Regions 5 and 6. The section is responsible for the regulatory control of the following areas: radioactive materials, radon, industrial sources and institutional sources. Each area has over 150 registrants or licensees. I am responsible for supervising 4 Radiation Health Physicists Levels II and a Radiation Protection Specialist. My duties include reviewing and approving all inspections, letters and reports submitted by the inspectors.

Site Decommissioning Projects - The region currently has 7 active sites. We review the decommissioning plans, which include; site characterization plans and reports, site cleanup standards, health and safety plans. We also review waste disposal reports, final and confirmatory survey data. We determine site release status by performing final surveys.

Landfill Radiation Protection Action Plans – Over 50 facilities in Regions 5 and 6 will have implemented a protective action plan to prevent radioactive materials from entering their facilities. The section is responsible for reviewing those plans and confirming those plans during start-up inspections. As section chief, I have the additional responsibility of advising these facilities, should materials, which fall outside the action plan, end up at their facility.

Dwight A. Shearer cont.

As part of the Beaver Valley Nuclear Power Station response team, I am responsible for reporting to the Emergency Operations Facility where I provide the technical link, in the event of a nuclear accident, between the plant and the State Emergency Operations Facility.

PA DEP/ Bureau of Radiation Protection/ SWRO
2003

Acting Program Manger – Water Supply -I was responsible for the oversight of the regional water supply program including 5 district offices, a permitting section and compliance section totaling more than 30 staff members. The West Nile and Black fly programs also reported to me.

The program's initiatives include: protecting against waterborne diseases, surface water filtration, protecting surface and groundwater sources, operator licensure for drinking and wastewater systems.

PA DEP/ Bureau of Radiation Protection/ SWRO
2002 – present

Growing Greener Project Advisor - My responsibilities include: verification of monies spent, interfacing with the award recipient and DEP to make sure all permits are being obtained and making sure the project meets all the requirements and time frames established by the Department.

- Whitsett Storm water Demonstration Project - \$96,240
- Mid Yough Agricultural Best Management Practices Project - \$299,306

PA DEP/ Bureau of Radiation Protection/ SWRO
2000

Acting Program Manger – Radiation Protection - Over a 3-month period, I was responsible for the oversight of the regional radiation program, which includes regions 5 and 6 covering the western 22 counties. The program incorporates all aspects of radiation including X-Ray, Radioactive Materials, Radon and Emergency Response to the nuclear power plants within the state.

Dwight A. Shearer cont.

PA DEP/ Bureau of Radiation Protection/ SWRO
1995 to 2001

Radiation Health Physicist II - Planned and conducted inspections and surveys of sources of ionizing radiation to determine compliance with State and Federal regulations. Surveys included calculating the design parameters of shielding requirements, and working distances to be maintained by the operator / public for safety. Evaluated efficacy of shielding designs as integral part of inspections performed. Consulted and assisted with nuclear engineers in the evaluation of nuclear facilities safety requirements as pertinent to actual or potential releases to the environment. Evaluated system designs of radon mitigation systems. The design parameters included: friction loss, proper use of material, head loss, proper fan allocation (wattage), structural integrity, dampening devices, discharge point, determination of air flow and pressure fields. Made recommendations to radon mitigating entities on how to improve the efficiency of their designed system.

Organizations

1995 - Conference of Radiation Control Program Directors, Inc.
Frankfort, Kentucky

Member:

Decommissioning (E-24)

Advisor:

Radioactive Waste Management (E-25)

2001- Health Physics Society (National)

Charley M. Smalls
PA DEP/BRP
PO Box 8469
Harrisburg, PA 17105-8469
717-783-5922
717-783-8965(fax)

Education

University of Maryland-College Park, MD
M.S., Zoology(cell biology), 1972

Knoxville College, Knoxville, TN
B.S., Knoxville, TN, 1965

Relevant Employment History

Pennsylvania Department of Environmental Protection, Harrisburg, PA
2002- Present
Radiation Health Physicist 2

Reviews radioactive material applications for hospitals, private practitioners and industries. Generates draft license documents for management review and signature. Maintains database of information on individuals, hospitals, and corporations, which are licensed by NRC and state to track sights of use, inventory, types of use, authorized users and Radiation Safety Officers. Coordinates and tracks personnel dosimetry for approximately 75 Department personnel.

Pennsylvania Department of Environmental Protection, Harrisburg, PA
2000-2001
Radiation Health Physicist 1

Edited diskettes submitted by radon testers and laboratories for entry into the Radon database using DOS, Excel and Access programs. Reviewed individual and firm applications for renewal of testing, laboratory and mitigation certification in compliance with 25 PA Code Chapter 240, Radon Regulations and DEP policies.

Milton S. Hershey Medical Center, Hershey, PA
1988-1994
Environmental Radiation Specialist

Analyzed environmental air and water samples taken in conjunction with HMC/PA-DER Environmental Monitoring Laboratory. This program was related to the 1979 nuclear accident at Three Mile Island. These analyses included gamma spectroscopy, gross beta in air, and tritium in water. Duties included calibration of analyzer systems, troubleshooting of laboratory equipment, participation in Environmental Protection Agency crosscheck program, and interpretation of laboratory data.

United States Environmental Protection Agency, Three Mile Island Field Station
Middletown, PA
1981-1988
Environmental Scientist

Analyzed environmental air and water samples for reactor-related radionuclide content. These analyses also included gas chromatographic techniques for the separation of krypton. Other duties included emergency response by analysis of samples for gamma-emitting radionuclides during the EPA's Office of Radiation Programs' response to the Chernobyl accident. Prepared Standard Operating Procedures for laboratory analyses and conferred with federal and state personnel to discuss laboratory techniques and data interpretation. Reviewed federal and state guidelines for the analysis of environmental air and water samples.

United States Environmental Protection Agency, Three Mile Island Field Station
Middletown, PA
1980-1981
Environmental Radiation Specialist

Served as a field monitor to collect air and water samples within a 10-mile radius of Three Mile Island. Water samples were analyzed by gamma spectroscopy.

Other Relevant Work Experiences
1965-1979

Work Experiences in Bio-Medical Research- Prepared animal and human tissues for light and electron microscopic examination. Used several types of electron microscopes to study tissues so that various cell types may be identified in normal and pathologic conditions. A listing of work experiences and study in bio-medical research is as follows:

Research Assistant, Milton S. Hershey Medical Center, Hershey, PA
Graduate Assistant, University of Maryland, College Park, MD
Research Technician, The Johns Hopkins University, Department of Pathology, Baltimore, MD
Laboratory Technician, The Medical University of South Carolina, Department of Anatomy, Charleston, SC

Professional Affiliations

Conference of Radiation Control Program Directors, Inc.

Publications

Smalls, C.M. and Goode, M.D.(1977). "Ca²⁺-accumulating components in developing skeletal muscle," J. Morphol. 151, 213-237

Other Training

| | | |
|--|--------------|--|
| Radiation Safety: Practical Applications | 8/4/2004 | EPA Training |
| Radiation Safety: Advanced for Environmental Professionals | 8/5/2004 | EPA Training |
| Medical Use of Byproduct Materials 10 CFR Part 35 | 8/6/2002 | NRC Training |
| Radiological Accident Assessment Concepts | 2/12/2001 | FEMA Training |
| Radon Measurement Proficiency Course(computer training) | 11/01/2000 | Eastern Regional Radon Training Ctr. Rutgers Univ. |
| Basic Incident Command System | 1/31/2002 | FEMA Independent Study Program |
| Radiological Emergency Response | 4/13/2001 | FEMA Independent Study Program |
| Radiological Emergency Management | 3/31/1999 | FEMA Independent Study Program |
| Training in Gamma Spectroscopy and Krypton Separation Techniques | 1982 1984 | Two 2-week training periods, EMSL, Las Vegas, NV |

Louis Ray Urciuolo
PA DEP / BRP
PO Box 8469
Harrisburg, PA 17105-8469
717-787-2480
717-783-8965 (fax)

May 26, 2005

Education

MS Health Physics, University of Florida, Gainesville, FL 1974
BS Astrophysics, Tufts University, Medford, MA 1971

Certification / Registration / Professional License - none

Relevant Employment History

Pennsylvania, Department of Environmental Protection, Harrisburg, PA
January 1979 – Present

Position: Radiation Protection Program Manager - January 2002 to Present

Title: Chief, Division of Radiation Control

Duties: Manager of the X-Ray and Radioactive Materials Sections with programs for x-ray registration, NARM and accelerator licensing. Coordinate with regional program management to ensure uniform inspection, enforcement and implementation of policy. Develop new or revised regulations and guidance to support programs areas. Bureau liaison to the Radiation Protection Advisory Committee, liaison to the Department's Cross Program Policy Working Group and in emergencies Environmental Protection Liaison Officer Radiological Assessment Manager.

Position: Radiation Protection Program Supervisor - November 1995 to January 2002

Title: Chief, Radioactive Material Licensing Section

Duties: Maintain a program of approximately 460 NARM licenses covering nuclear medicine, R&D, MFG & Distribution, waste handling, XRF and density gauges and reciprocity. Review and approve all new licenses or amendments for personnel qualifications, facilities, SOPs, ALARA and safety programs. Create and revise standard license conditions and licensing guides.

Position: Radiation Health Physicist II – January 1979 to November 1995

Duties: Field Inspector for the Central Regional office. Inspect medical, industrial, research and teaching facilities for compliance with state radiological health regulations and implementation of good health physics practices in the use of x-ray machines and NARM. Investigate over exposures, misadministrations and orphan sources. Respond to accidents (highway spills, damaged moisture density gauges...). Assist in the survey and cleanup of contaminated facilities. Perform calibrations of survey meters used for inspection and emergency response. Provide training in the use of survey meters.

Pan American World Airways Aerospace Division
Occupational Medicine & Environmental Health Services (OMEHS)
Cape Canaveral, Florida
November 1976 to November 1978

Position: Senior Health Physicist

Title: Supervisor of Health Physics Services

Duties: Manage the operational implementation of the radiation safety program services at the Kennedy Space Center and Cape Canaveral Air Force Station. Approve all radiation work permits. Update radiation safety policy and handbooks for KSC. During major radioactive source launches (VOYAGER I,II RTGs) coordinate a multi-agency contingency operation for source recovery and restoration of facility operations, organize and direct 10 onsite field teams. RSO for a broadscope radioactive material license. Management member of OMEHS grievance arbitration board, held Top Secret and Confidential Nuclear Weapons and Defense Installation clearance.

Position: Radiation Health Physicist I – January 1975 to November 1976

Duties: Field Inspector for the Western Regional office. Inspect medical, industrial, research and teaching facilities for compliance with state radiological health regulations and implementation of good health physics practices in the use of x-ray machines and NARM. Investigate over exposures and orphan sources. Respond to accidents, assist in the survey and cleanup of contaminated facilities.

Professional Affiliations

Health Physics Society
Council of Radiation Control Program Directors

Bryan R. Werner
PA DEP / BRP
PO Box 8469
Harrisburg, PA 17105-8469
717-787-2781
717-783-8965 (fax)

Education

University of Massachusetts Lowell, Lowell, MA
M.S. Radiological Sciences and Protection, 2000

Dickinson College, Carlisle, PA
B.S., Physics, 1998

Relevant Employment History

Commonwealth of Pennsylvania, Harrisburg, PA
September 2000 – Present

Radiation Health Physicist Decommissioning Section

Currently assigned as DEP/BRP oversight for the Quehanna Site Decommissioning Project. Some of the duties include, reviewing all documentation pertaining to radioactive materials, walk-downs of the work areas to check radiation controls and safety, radiation safety verification, and collection of DEP air samples. Other general responsibilities include document reviews and decision making for various other decommissioning sites in Pennsylvania. Have also performed final status surveys for the NRC their licensed facilities.

Sciencetech NES, Inc., New Milford, CT
June 2000 – September 2000

Radiological Engineer

Worked at Quehanna Site Decommissioning Project as primary radiation laboratory operator. Responsibilities included sample analysis, performing radiation surveys, and providing health physics support. Also spent time working at Connecticut Yankee Nuclear Power Plant working with the Off-Site Radiation recovery Effort. Work there consisted of document review and performing a source term characterization for all the recovered materials.

Oak Ridge Institute for Science and Education, Oak Ridge, TN
May 1999 – August 1999

Research Assistant/Intern

Environmental Survey and Site Assessment Program: Performed various radiation surveys and assisted in the analysis of the data. Survey work consisted of DOE labs and areas at the K-25 industrial area.

Professional Affiliations

Conference of Radiation Control Program Directors
Health Physics Society

Jeffrey L. Whitehead, RRPT

PA DEP/BRP

PO Box 8469

Harrisburg, PA 17105-8469

717-787-2964

717-783-8965 (fax)

Education/degree

University of the State of New York, Albany, NY

B.S., Nuclear Technology, Health Physics Option, 1992

University of the State of New York, Albany, NY

A.S., Liberal Studies, 1986

Certification / Registration / Professional License

National Registry of Radiation Protection Technologists- 1981

Relevant Employment History

Pennsylvania Dept of Environmental Protection, Bureau of Radiation Protection,
Harrisburg, PA

December 2001 – Present

Radiation Health Physicist 2, Decommissioning and Environmental Surveillance
Division

Review and evaluate decommissioning plans for decommissioning sites. Perform inspections at decommissioning sites. Develop and implement confirmatory survey plans for decommissioning sites. Obtain environmental and radiological samples and radiation readings. Perform independent dose assessments for decommissioning sites. Respond as Data Evaluation Coordinator and RASCAL operator for radiological emergencies and drills.

Three Mile Island Nuclear Station, Middletown, PA

February 1981 – November 2001

Senior Emergency Planner, Radiological Emergency Planning

Developed, conducted and evaluated radiological emergency drills. Authored and revised Emergency Plans and procedures. Developed and implemented radiological emergency response procedures, training and drills for hospital and ambulance personnel for the treatment and decontamination of radiation accident patients. Developed and provided training and administered exams for radiological emergency response personnel. Performed Independent Safety Reviews and Technical Reviews on Emergency Plan and procedures. Performed self-assessments and audits of radiological emergency preparedness programs. Served as the senior corporate radiation protection representative for response to radiological emergencies and drills.

Three Mile Island Nuclear Station, Middletown, PA

February 1980 – January 1981

Health Physics Instructor

Developed and provided classroom and practical (hands-on) training for health physics technicians. Authored and administered written and oral exams.

Three Mile Island Nuclear Station, Middletown, PA

September 1979 – January 1980

Health Physics Foreman/Technician

Supervised health physics technicians in the performance of radiation protection duties in accordance with requirements of 10CFR20 in support of post-accident recovery efforts at Three Mile Island Unit 2. Performed radiation and contamination surveys, air sampling, analysis, dose tracking, personnel monitoring, contamination control and decontamination.

Relevant Military Experience

U.S. Navy

Active Duty: September 1973 – September 1979,

Reserve Duty: September 1979 – March 1994

Machinist's Mate Chief Petty Officer

Last Active Duty Assignment: USS South Carolina (CGN-37)

Performed radiation protection, chemistry controls, mechanical operations and maintenance duties associated with the operation of a naval nuclear propulsion plant. Supervised technicians in performance of radiation protection and chemistry controls duties. Responsible for oversight of the training program for all nuclear trained crew members. Provided classroom and on-the-job training. Administered practical and written exams and administered oral qualification boards. Responsible for development, conduct and evaluation of all nuclear propulsion plant emergency drills.

Professional Affiliations

National Registry of Radiation Protection Technologists

Susquehanna Valley Chapter- Health Physics Society

Full name with middle initial Stephen E. Williams, Sr.
Work address PO Box 8469
Work telephone 717-787-5385
Work fax 717-783-8965

Education/degree (most recent first)

| Year | Degree | Institution |
|-------------|------------------------------------|-----------------------|
| 2005 | MS Environmental Pollution Control | Penn State University |
| 1976 | BS Radiological Health | Duquesne University |

Certification / Registration / Professional License

Relevant Employment History

Employer Department of Environmental Protection / Bureau of Radiation Protection
Begin date – 2000-Present

Position/Title Radiation Protection Program Supervisor, X-ray Section

Brief description of duties / Position Summary Radiological Professional, with a working knowledge of radiation hazards and radiation protection. Supervises the X-ray inspection, x-ray and x-ray service provider registration, accelerator licensing and mammography programs. Designated FDA contract contact for MQSA, NEXT and Level 2 surveys. Maintains the x-ray procedures survey manual. For reactor emergencies, Health Physics liaison to the licensee's Emergency Offsite Facility.

Employer TECHNICAL MANAGEMENT SERVICES, Simsbury, CT.

Begin date – 1995-2000

Position/Title Course Instructor

Brief description of duties / Position Summary Created and presented a specialized one week course in Effluent and Environmental Monitoring provided to nuclear industry professionals.

Employer Environmental Science Technology Inc.

Begin date – 2000-2000

Position/Title Regional Director

Brief description of duties / Position Summary Environmental project manager proficient in identifying and handling environmental and operational problems. Duties include environmental project planning, computer processing, environmental assessments, quality operations, employee relations, training and communications. Supervision of project work groups consisting of qualified technicians, and administrative personnel. Contracts included: Hazardous Waste disposal, Site Environmental Assessments, UST removals, Lead Paint and Asbestos surveys, and air quality surveys. Certified Asbestos Building Inspector.

Relevant Employment History – Cont.

Employer American Plumbing & Petroleum Services Co., INC.

Begin date – 1999-2000

Position/Title Regional Director

Brief description of duties / Position Summary Director of all phases of Construction Management Team. Responsible for administration and engineering of Bonding, Insurance, Bidding processes, Invoicing, and Coordination of multiple construction projects, including underground tank removals and installations. Supervised construction work teams and project foremen at each project location.

Employer Spectra Services

Begin date – End date 1998-1999

Position/Title Project Manager

Brief description of duties / Position Summary Management of Underground and Aboveground Tank Removal and Installation Program. Perform Site Environmental Assessments and Evaluations. Supervised construction work teams and project foremen at each project location.

Employer General Public Utilities Nuclear Corp

Begin date – 1980-1997

Position/Title

GPU NUCLEAR CORPORATION

Three Mile Island Nuclear Station (TMI), Middletown, Pa

GPUN Corporate Radiological Project Manager

1995 to 1997

Project Manager for the direction of GPU Nuclear technician survey teams, which provided radiological, environmental, effluent and safety services to Public Service of Colorado at the Fort St. Vrain (FSV) Nuclear Facility.

GPUN Nuclear Safety and Compliance Committee (NSCC) Member

1993 to 1995

Independent safety and compliance oversight at the GPU Nuclear facilities at Three Mile Island, Oyster Creek, New Jersey and Saxton, Pennsylvania. Computer trended parameters of radiological, environmental, engineering, maintenance, emergency planning, and operations programs for performance indications and areas of concern.

GPUN Senior Radiological Engineer

1980 to 1993

Provided Radiological, Emergency Planning, Environmental and Administrative support to the Radiological Controls, Quality Assurance, Plant Engineering and Plant Operations Departments. Health physics support for dosimetry, QA, procedures, Technical specifications, regulations, emergency planning, radiological effluent releases, Three Mile Island Unit Two radioactive waste shipments, 10CFR61 waste characterization, RETS, compliance, OTSG tube plugging, environmental monitoring, reactor coolant pump seal replacements, reactor building entries, reports to GPU Nuclear Board of Directors concerning power plant operation, Directed verification release survey of Ft St Vrain nuclear power plant.

Relevant Employment History - cont.

Employer Consolidated X-Ray Service Corp.

Begin date – 1970-1976

Position/Title Industrial Radiographer Level 2

Brief description of duties / Position Summary Performed Industrial Radiography

Employer Wayne State University, Detroit Michigan

Begin date – End date 1976-1980

Position/Title University Health Physicist

Brief description of duties / Position Summary Supervised University Health Physics program including: radioactive material inventory, radiological surveys, waste disposal, dosimetry, x-ray/accelerator surveys and supervising university technicians throughout the university facilities.

Relevant Military Experience - No

Begin date – End date

Position/Title

Last Duty Assignment and Major Command

Description of duties/Position Summary

Professional Affiliations

Health Physics Society

Publications

Scott L. Wilson

April 28, 2005

PA DEP / BRP
P.O. Box 8469
Harrisburg, PA
717-787-2208
717-783-8965 (fax)

Education

University of Phoenix – Philadelphia, PA
B.S., Business Administration, 2003

Central Florida Community College – Ocala, Florida
A.S., Radiation Protection Technology, 1992

National Academy for Nuclear Training – Crystal River, Florida
Radiological Protection Technician Training Program, 1990

Certification / Registration / Professional License

National Registry of Radiation Protection Technologists

Relevant Employment History

Pennsylvania Department of Environmental Protection, Harrisburg, PA
2004 – Present

Health Physicist II, Licensing Section

Responsible for monitoring and controlling radiological health hazards to ensure compliance with applicable Federal and State laws and regulations, technical review of radioactive material license applications; generate draft license documents for management review and signature; plan and conduct onsite inspections and surveys of applicant/licensee facilities as required; review radiation monitoring action plans and reports for Pennsylvania landfill permits and perform RESRAD analysis to support burial of deregulated short lived radioactive materials under solid waste permit. Perform NMED reporting functions for the Commonwealth.

Maryland Department of Environment
2003 – 2004

Health Physicist II, Radiation Producing Machines Inspector

Responsible for inspecting x-ray machines at dental and veterinary facilities to ensure the machines are performing according to specifications and machine operators are following proper safety procedures. Responsible for Radiological Health Physicist duties in response to emergencies at Calvert Cliffs Nuclear Power Plant and Peach Bottom Atomic Power Station.

Exelon Nuclear - Peach Bottom Atomic Power Station
2000 – 2003

Radiological Instrumentation Coordinator – 2002/2003

Responsible for oversight of the radiation protection instrumentation calibration program, radioactive source control, personnel contamination event evaluations and investigations, and emergency preparedness equipment related to radiation protection.

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Relevant Employment History (continued)**Emergency Preparedness Coordinator – 2001/2002**

Responsibilities included: for implementation of the Peach Bottom Atomic Power Station Emergency Plan. Implementation includes: Drill and Exercise planning, coordination, execution and evaluation; corrective action initiation and monitoring including use of the Significant Determination Process for process and equipment changes; program self-assessments; Emergency response organization training, equipment reliability analysis, maintenance and testing; NRC Performance Indicator evaluations and reporting; Procedure review, revision and approval.

Health Physics Technician – 2000/2001

Responsible for performance of radiological surveys in support of federal regulations and company procedures; continuous radiological coverage of employees performing duties in High Radiation Areas, Very High Radiation Areas, Airborne Radioactivity Areas, Neutron Radiation Areas, and Contaminated Areas; ALARA planning and pre-activity meetings, post activity reviews and meetings, personnel job safety assessments, emergency response duties, Health Physics technician training and qualification through testing, procedure review and revision, Confined space Monitoring, industrial hygiene condition assessments and monitoring.

Florida Power Corporation, Health Physics & Industrial Hygiene Technician

1986 – 2000

Responsible for performance of radiological surveys and area posting in support of federal regulations and station procedures; continuous radiological coverage of employees performing duties in High Radiation Areas, Very High Radiation Areas, Airborne Radioactivity Areas, Neutron Radiation Areas, and Contaminated Areas; ALARA planning and pre-activity meetings, post activity reviews and meetings, personnel job safety assessments, emergency response duties, Health Physics technician training and qualification through testing, procedure review and revision, confined space monitoring, industrial hygiene condition assessments and monitoring, RWP Authoring, personnel and area / environmental dosimetry management, operation and analysis of whole body counter, respiratory protection fit testing, maintenance and operation of respiratory and engineering control devices.

Florida Power Corporation, Building Serviceman & Radwaste Technician

1985 – 1986

Responsibilities included: Building maintenance, facility and tool decontamination, radioactive solid waste sorting and packaging, foreign material exclusion area monitoring, radioactive waste handling and processing, Fire Brigade, hazardous waste sampling and processing, protective clothing laundering, escort radiation workers and visitors in the Protected Area and Radiation Controlled Area.

Professional Affiliations

National Registry of Radiation Protection Technologists
Conference of Radiation Control Program Directors

Roy V. Woods

PA DEP/ Bureau of Radiation Protection/SWRO
400 Waterfront Drive
Pittsburgh, PA 15222
Office: (412) 442-4223
Fax: (412) 442-5246

Relevant Employment History:

PA DEP/ Bureau of Radiation Protection
1989 - present
Radiation Health Physicist 2 - Responsible for performing regulatory inspections of x-ray registrants and RAM licensees in DEP regions 5 & 6, emergency response, and D&D oversight.

Allied Nuclear Inc.
Bettis Atomic Power Lab
1982-1986
Radiological Control Foreman - Provided radiation protection during decommissioning activities. Performed routine and special surveys. Supervised radiological control technicians and work crews. Crews consisted of approximately 15 decon technicians. Wrote and reviewed procedures and RWPs. Trained radiological technicians.

Babcock and Wilcox Corp
1972-1982
Sr. Health Physics Technician - Provided radiological protection during all plant conditions. Established and inspected criticality control zones. Assisted in procedure and RWP development. Supervised the operation of the health physics department during off hours. Maintained and calibrated health physics department instrumentation.

Professional Affiliations:

1997- Conference of Radiation Control Program Directors, Inc.

James G. Yusko, CHP

Pennsylvania Department of Environmental Protection
Radiation Protection, Field Operations
400 Waterfront Drive
Pittsburgh, PA 15222-4745
412.442.4000; 412.442.5246-fax

Education

University of Pittsburgh, Pittsburgh, PA
M.S., Radiation Health (GSPH), 1975

Carnegie Mellon University, Pittsburgh, PA
B.S., Physics, 1971

Certification / Registration / Professional License

American Board of Health Physics – Comprehensive; 1980; recertified through 2008
American Board of Radiology – Diplomate, Diagnostic Radiologic Physics; 2005.

Relevant Employment History

Pennsylvania Department of Environmental Protection, Pittsburgh, PA
March, 1980 – present
Regional Manager, Radiation Protection
Responsible for regional operations and emergency response for around 4000 facilities using radiation sources in the 22-county western region. See resume.

International Atomic Energy Agency, Vienna, Austria
March 2000 – February 2001
Radiation Source Specialist
Cost-free expert to work on IAEA's "Safety of Radiation Sources and Security of Radioactive Materials: Action Plan of the Agency." See resume.

Allegheny General Hospital, Pittsburgh, PA
September, 1975 – February, 1980
Radiation Protection Officer
Developed, implemented, and effected a comprehensive radiation safety program for a 750-bed research teaching hospital. See resume.

University of Pittsburgh, Pittsburgh, PA
May, 1974 – September, 1975
Assistant Health Physicist, Radiation Safety Office
See resume.

Professional Affiliations (see resume for details)

Health Physics Society
American Academy of Health Physics
Conference of Radiation Control Program Directors, Inc.

Western Pennsylvania Chapter, Health Physics Society
Susquehanna Valley Chapter, Health Physics Society
National Council on Radiation Protection and Measurements
International Standards Organization
American National Standards Institute

Publications

See attached list of papers and presentations.

PAPERS AND PRESENTATIONS

Yusko, J. G., K. D. Modes, J. D. Kinnemann, "Safe Disposition of Endangered Sealed Radioactive Sources," presented at the 38th Midyear Topical Meeting of the Health Physics Society, New Orleans, Louisiana, February 13-16, 2005; Included in the CD "HPS 2005 Midyear Meeting: Materials Control & Security: Risk Assessment, Handling & Detection." (Health Physics Society, McLean, Virginia)

"Improving the Regulatory Control over Radioactive Sources," presented at the 48th Annual Meeting of the Health Physics Society, San Diego, California, July 20-24, 2003

"Orphan Radiation Sources," presented at the AAHP Professional Enrichment Program (lecture 3-C) for the 2003 HPS Midyear Topical Meeting, San Antonio, Texas, January 26, 2003.

"The IAEA Action Plan on Safety and Security of Radioactive and Nuclear Sources," presented to the Susquehanna Valley Chapter, Health Physics Society, Hershey, Pennsylvania, October 23, 2002.

"Radiation Accidents Involving 'Orphan Sources,'" presented at the 47th Annual Meeting of the Health Physics Society, Tampa, Florida, June 16-20, 2002.

"Orphan Sources – The National Perspective," presented at the 9th NELRAD Conference, Northeastern University, Weston, Massachusetts, April 24, 2002.

"The IAEA Action Plan on the Safety of Radiation Sources and Security of Radioactive Materials," presented to the Western Pennsylvania Chapter of the Health Physics Society, Pittsburgh, Pennsylvania, May 31, 2001.

"The IAEA action plan on the safety of radiation sources and security of radioactive material," published in *Radiation Safety and ALARA Considerations for the 21st Century*, pages 137-142 (Medical Physics Publishing, Madison, Wisconsin); presentation for the 34th Midyear Topical Symposium of the Health Physics Society, Anaheim, California, February 4-7, 2001.

Lubenau, J. O. and J. G. Yusko, "Spent/Disused/Orphan Sources: Action is Needed," Health Physics Society *Newsletter*, July 2000

"Harmonization Among Local, State, and Federal Programs in a Non-Agreement State," presented at the 45th Annual Meeting of the Health Physics Society, Denver, Colorado, June 25-29, 2000.

"Problems with Radioactive Sources in Recycled Metals," paper presentation for the Society of Automotive Engineers National Meeting, Detroit, March 6-9, 2000; published as SAE Technical Paper 2000-01-0667 (reprinted from: *Environmental Concepts for the Automotive Industry* (SP-1542)); SAE International, Warrendale, PA

"NORM and Metals Recycling in the United States," invited presentation given at the Natural Radiation and NORM" international conference, London, England, September 30 – October 1, 1999.

"Decontamination of Recycling Facilities," presented at the 1999 Health Physics Society Summer School, Messiah College, Grantham, Pennsylvania, June 20-25, 1999 and published in *Decommissioning and Restoration of Nuclear Facilities*, (Michael J. Slobodien, editor), Medical Physics Publishing, Madison, Wisconsin (proceedings of the Summer School).

"Orphan Sources Initiative," presented at the Specialty Steel Institute of North America's Health and Safety Committee meeting, Pittsburgh, Pennsylvania, May 14, 1999.

"Impacts of Radioactive Materials in the Recycling Industry, presented at the "Radioactivity in the Public Domain" seminar of the Pennsylvania Chapter of the Institute of Scrap Recycling Industries, Inc., Harrisburg, Pennsylvania, November 12, 1998.

Yusko, J. G. and J. W. Lubinski, "Radiation Sources in the Public Domain – Control of Radioactive Sources and Devices," presented at the Ohio Radioactive Materials Users Group 1998 Fall Workshop, "A Look Ahead: Radiation in the New Century; A Sampling of Issues to Consider for the 2000's," Columbus, Ohio, November 4, 1998.

Yusko, J. G. and J. Wolfson, "We've Shredded a Radioactive Source! – A Case Study," presented at the Institute of Scrap Recycling Industries, Inc., "Radioactivity in the Scrap Recycling Process" seminar, Orlando, Florida, June 28-29, 1998.

Lubenau, J. O., J. G. Yusko, J. Karhnak, A. Wallo, "Government Regulations – Present and Future: Can They Help?" presented at the Institute of Scrap Recycling Industries, Inc., "Radioactivity in the Scrap Recycling Process" seminar, Orlando, Florida, June 28-29, 1998.

"Radioactivity in Recycling: An International Problem," invited keynote presentation at the international conference "Radioactivity in the Metal Scraps Recycling Industry: Consequences and Solutions," Brescia, Italy, June 23, 1998

"Impacts of Inadvertent Meltings of Radioactive Materials," presented at the Lawrence Berkeley National Laboratory's "Workshop on the Detection of Radioactive Sources in Metal Scrap," Dallas, Texas, June 8-9, 1998.

Lubenau, J. O. and J. G. Yusko, "Unwanted Radioactive Sources in the Public Domain," presented at the Canadian Radiation Protection Association 1998 conference, Ottawa, Ontario, Canada, May 25-28, 1998.

Lubenau, J. O. and J. G. Yusko, "Radioactive Materials in Recycled Metals - An Update," *Health Physics*, Vol. 74, pages 293-299, March, 1998.

Yusko, J. G. and J. O. Lubenau, "Optimizing the Radiation Monitoring of Recycled Metallics," presented at the 31st Midyear Meeting, Health Physics Society, Mobile, Alabama, February 8-11, 1998; published in *Good Practices in Health Physics*, G. R. Komp and M. A. Thompson, editors; pp. 55-58; Medical Physics Publishing, Madison, Wisconsin, 1998

Lubenau, J. O. and J. G. Yusko, "Problems in the United States with Control of Radioactive Sources," presented at the International Conference on the Radiological Accident with Cs-137 in Goiania -- 10 Years Later, Goiania, Brazil, October 26-31, 1997; published in proceedings of that conference.

"Licensed Sources Entering the Waste Stream," presented to the Ohio State University - University of Cincinnati Nuclear Engineering Seminar Program, Columbus, Ohio, October 28, 1997

"Radiation Sources Where You Don't Want Them," presented to a regular chapter meeting of the Buckeye Chapter, Health Physics Society, Columbus, Ohio, October 27, 1997

Lubenau, J. O. and J. G. Yusko, "Radioactive Sources in Recycled Metal: Solving and Preventing the Problem," presented as a Professional Enrichment Program lecture at the 42nd Annual Meeting of the Health Physics Society, San Antonio, Texas, June 29-July 3, 1997

"Report on the NRC-Agreement States Working Group on the Control and Accountability of Radioactive Devices," presented to *New Steel* magazine's "Managing Metallics" seminar, Chicago, Illinois, June 5-6, 1997

"Radioactive Materials in Recycled Metals," presented at a regular chapter meeting of the Western Pennsylvania Chapter, Health Physics Society, Pittsburgh, Pennsylvania, February 19, 1997

"A State's Perspective on NORM," presented at the 4th Annual Conference of the University of Tennessee's Energy, Environment and Resource Center, "Beneficial Reuse '96." Knoxville, Tennessee, October 22-24, 1996

"Recommendations of the Joint Agreement States - Nuclear Regulatory Commission Working Group on Licensed Devices," presented to the meeting of the Environment Committee of the Steel Manufacturers Association, Pittsburgh, Pennsylvania, August 20, 1996

Lubenau, J. O. and J. G. Yusko, "Radioactive Sources in Recycled Metals: Preventing the Problem," presented as a Professional Enrichment Program course at the 41st Annual Meeting of the Health Physics Society, Seattle, Washington, July 25, 1996

"Radiation Misadministrations," presented at regular meeting of the Tri-State Radiation Oncology Society," Pittsburgh, Pennsylvania, June 19, 1996.

Lubenau, J. O., Yusko, J. G., and Cool, D. A., "Radioactive Contamination of Recycled Metals," presented at the 1996 International Congress on Radiation Protection (IRPA 9), April 14-19, 1996, Vienna, Austria.

Rittiger, C. L. and J. G. Yusko, "An Overview of NORM Data Collected in Pennsylvania Specific to Oil and Gas Production," presented at the 29th Health Physics Society Midyear Topical Meeting, "NORM/NARM: Regulation and Risk Assessment," and published in the *1996 Midyear Proceedings: "NORM/NARM: Regulation and Risk Assessment,"* Scottsdale, Arizona, January 7-10, 1996; published by the Health Physics Society, McLean, Virginia.

"Radioactivity in Recycled Metals," presented at a joint meeting of the Susquehanna Valley Chapter, Health Physics Society and the Central Pennsylvania Section, American Nuclear Society, Harrisburg, Pennsylvania, December 6, 1995.

"Radiation in the Scrap Recycling Stream," presented at the 3rd Annual Conference of the University of Tennessee's Energy, Environment and Resources Center, "Beneficial Reuse '95," Knoxville, Tennessee August 1-3, 1995.

Lubenau, J. O. and Yusko, J. G., "Radioactive Materials in Recycled Metals," presented as a Continuing Education Lecture CEL-8 at the 40th Annual Meeting, Health Physics Society, Boston, Massachusetts, July 23-27, 1995.

Lubenau, J. O. and Yusko, J. G., "Radioactive Materials in Recycled Metals," presented at a regular meeting of the Delaware Valley Society for Radiation Safety, King of Prussia, Pennsylvania, June 7, 1995.

Yusko, J. G. and J. O. Lubenau, "The Continuing Problem of Radioactive Scrap," presented at the 27th National Conference on Radiation Control, San Antonio, TX, May 7-10, 1995; published in the *Proceedings of the 27th National Conference on Radiation Control*, CRCPD Publication 95-4, Frankfort, Kentucky, 1995.

Lubenau, J. O. and Yusko, J. G., "Radioactive Materials in Recycled Metals," published in *Health Physics*, Vol. 68, pages 440-451, April, 1995

Lubenau, J. O. and Yusko, J. G., "Radioactive Materials in Recycled Metals," presented at a regular meeting of the Baltimore-Washington Chapter, Health Physics Society, Rockville, Maryland, February 22, 1995

"Recent Activities of the CRCPD Radiation in Resource Recovery Committee," presented at the Steel Manufacturer's Association Joint Committee Meeting, Point Clear, Alabama, October 16-18, 1994

Angelo, D. A., C. L. Rittiger, R. P. Scott, J. P. Winston and J. G. Yusko, "Exposure Rates Associated with High Level Fluoroscopic Equipment and Data Recording Modes," presented at the 26th National Conference on Radiation Control of the Conference of Radiation Control Program Directors, Inc., Williamsburg, Virginia, May 22-26, 1994. Published in CRCPD Publication 94-9, *26th National Conference on Radiation Control*, Frankfort, Kentucky, October, 1994; also published in *Operational Radiation Safety (Health Physics supplement)*; 76:S78-S82; May, 1999

"Radioactive Materials in Metal Recycling," presented at a regular meeting of the Western New York Chapter, Health Physics Society, Perinton, New York, May 19, 1994.

"The Development and Future of Pennsylvania's Regulations for Radiological Health," presented at the "Regulatory Issues in Medical Physics and Their Implications" Symposium of the Delaware Valley Chapter, American Association of Physicists in Medicine, Philadelphia, Pennsylvania, May 17, 1994.

"Radioactive Materials in Metal Scrap -- A Continuing Problem," presented at a regular chapter meeting of the Pittsburgh Chapter, Institute of Scrap Recycling Industries, Pittsburgh, Pennsylvania, May 11, 1994.

Lubenau, J. O. and Yusko, J. G., "Radioactivity in Metal Scrap - An International Problem," and "Radioactivity in Metal Scrap - An International Problem Supplement," *Proceedings of the Second Regional Congress on Radiological and Nuclear Safety* [to be printed], November 22-26, 1993, Zacatecas, Mexico.

"Special Concerns when Monitoring Scrap for Radioactivity," presented at the Kaiser Aluminum and Chemical Corporation Health and Safety Workshop, Seattle, Washington, August 2-4, 1993.

"Radioactive Scrap Metal - the CRCPD Perspective," presented at the University of Tennessee Energy, Environment and Resources Center's "Radioactive Scrap Metal" Conference, Knoxville, Tennessee, July 13-14, 1993.

Gallagher, R. G., M. Jarosz, and J. G. Yusko, panel discussion on the "Loss of an Ir-192 Source and Therapy Misadministration at Indiana Regional Cancer Center, Indiana, Pennsylvania, on November 16, 1992" presented at a regular meeting of the Western Pennsylvania Chapter, Health Physics Society, Pittsburgh, Pennsylvania, April 28, 1993.

"The Pennsylvania Regulations for Radiologic Health - Current and Future," presented at the 50th Anniversary meeting of the Pennsylvania Society of Radiologic Technologists, Monroeville, Pennsylvania, April 16, 1993.

"Radon," guest television interview for Talkin' Pittsburgh, current and public affairs program of WPXI, Channel 11, Pittsburgh, first broadcast October 31, 1992.

"Hazards and Remedies from Radon Gas," presented at a regular meeting of the Greenville Chapter, American Business Woman's Association, Greenville, Pennsylvania, August 12, 1992

Finklea, S. and J. G. Yusko, "Naturally Occurring Radioactive Material -- Regulation, Disposal, and Health Physics," course sponsored by the American Academy of Health Physics, Columbus, Ohio, June 20, 1992

"E-23 (Metal Scrap Radioactivity) Committee - Recent Activities and Recommendations," presented at the 24th National Conference of the Conference of Radiation Control Program Directors, Inc., Orlando, Florida, May 17-21, 1992. Published in CRCPD Publication 92-5, *24th Annual National Conference on Radiation Control*, Frankfort, KY, September 1992.

"Compliance With The Pennsylvania Regulations For Radiological Health," presented at a regular meeting of the Penn-Ohio Chapter, American Association of Physicists in Medicine, Youngstown, Ohio, August 7, 1991

Yusko, J. G. and J. O. Lubenau, "Radioactive Metal Scrap - Are We Solving The Problem," presented at the 36th Annual Meeting of the Health Physics Society, Washington, D.C., July 21-25, 1991.

Lubenau, J. O., A. LaMastra, M. S. Peters and J. G. Yusko, "A Radiation Protection Primer," published in *Scrap Processing and Recycling*, Vol. 48, pages 107-112, March-April, 1991

"Regulations Regarding Radiation Therapy" presented at the "Concepts In Radiation and Nutrition Therapy for Cancer Patients" Fall Cancer Symposium of the Monongahela Valley Hospital and the American Cancer Society Washington County Unit, Monongahela, Pennsylvania, October 31, 1990

"Will Monitoring Help Me?" presented at the Institute of Scrap Recycling Industries, Inc., "Radioactivity in Scrap Metal" Seminar, Washington, District of Columbia, September 12, 1990

Lubenau, J. O. and J. G. Yusko, "Radioactivity in Metal Scrap: Working Together To Solve a Problem," presented at the 35th Annual Meeting of the Health Physics Society, Anaheim, California, June 24-28, 1990

Yusko, J. G. and J. O. Lubenau, "What To Do When The Alarm Goes Off: A Suggested Procedure For Checking Contaminated Metal Products," presented at the 35th Annual Meeting of the Health Physics Society, Anaheim, California, June 24-28, 1990

"Detection and Monitoring of Radioactivity in Metal Scrap," presented at the 58th Annual Meeting of the Electric Metal Makers Guild, Inc., Malvern, Pennsylvania, June 19-22, 1990

"A Regulatory Health Physicist's View of the BEIR-V Findings," presented at the "Radiation... A Fact of Your Life" session at the 65th Annual Safety, Health and Security Conference and Exhibit of the Western Pennsylvania Safety Council, Monroeville, Pennsylvania, April 10, 1990

"Assistance to Mills and Scrap Yards," letter to the editor of the Health Physics Society *Newsletter*, edition for March 1990.

"Pennsylvania Experience with Radioactivity in Scrap Steel," presented at the Nuclear Regulatory Commission Special Topics Workshop, Downers' Grove, Illinois, November 27 - December 1, 1989

"Changes in State Regulations and Procedures DER Uses in Inspections," presented at the Universal Medical Services, Inc., "Radiation Safety and Quality Control" Seminar, Beaver Falls, Pennsylvania, August 23, 1989

"Radon and its Implications for Schools," presented at the Educational Facilities graduate course of the University of Pittsburgh School of Education Department of Administrative and Policy Studies, Pittsburgh, Pennsylvania, July 13, 1989

"The Danger of Radon Gas and Remedies," presented at a regular meeting of the Fox Chapel Rotary Club, Fox Chapel, Pennsylvania, June 12, 1989

"Concerns About Radon Gas," presented at the 64th Annual Safety, Health and Security Conference and Exhibit of the Western Pennsylvania Safety Council, Monroeville, Pennsylvania, April 4-6, 1989

"Federal Perspectives on Indoor Radon," presented at the 64th Annual Safety, Health and Security Conference and Exhibit of the Western Pennsylvania Safety Council, Monroeville, Pennsylvania, April 4-6, 1989

"Hazards, Detection and Control of Indoor Radon," presented at the Duquesne Light Company "Supervisory Association Safety Night" meeting, Pittsburgh, Pennsylvania, February 22, 1989

"Health Effects From Pediatric Exposure to Indoor Radon," presented at the Mercy Hospital Department of Pediatrics Grand Rounds conference, Pittsburgh, Pennsylvania, February 21, 1989

"Radon - Why We Should Be Concerned," presented at a regular meeting of the Pennsylvania Gas Association Western Division, Pittsburgh, Pennsylvania, February 16, 1989

"Hazards from Indoor Radon," presented at a regular meeting of the Pittsburgh Section, Society of Nuclear Medicine Technologists, Pittsburgh, Pennsylvania, January 19, 1989

"Indoor Radon," presented at a regular meeting of the Sons of the American Revolution, Pittsburgh, Pennsylvania, November 17, 1988

"Radon in the Workplace and at Home," presented at a regular meeting of the West Jefferson Hills Chamber of Commerce, Pittsburgh, Pennsylvania, October 20, 1988

"Hazards of Exposure to Indoor Radon," guest interview for "Pittsburgh 2-Day" public and current affairs program of KDKA TV-2, Pittsburgh, Pennsylvania, program first telecast September 13, 1988

"State Viewpoint (on New Regulations)," presented at the Delaware Valley Association of Physicists in Medicine - Delaware Valley Society for Radiation Safety "Impact of New Regulations on Radiological Physics Practice" Symposium, Philadelphia, Pennsylvania, May 17, 1988

"Natural Radiation Problems - Fact or Fiction," presented at the 23rd Annual Engineering Discussion of the Industrial Health Foundation, Inc., Pittsburgh, Pennsylvania, March 21-22, 1988

"The Pennsylvania Low Level Radioactive Waste Disposal Act," presented at a regular meeting of the Western Pennsylvania Chapter, Health Physics Society, Pittsburgh, Pennsylvania, December 9, 1987

"Indoor Radon," presented at a regular meeting of the Greater Meadville Board of Realtors, Meadville, Pennsylvania, November 10, 1987

"Indoor Radon and Radon in Ground Water," presented at the American Water Works Association - Water Works Operators' Association joint meeting, Pittsburgh, Pennsylvania, October 16, 1987

Yusko, J. G. and J. O. Lubenau, "Steel Contamination Incidents Involving Naturally Occurring Radioactive Materials," presented at the 32nd Annual Meeting of the Health Physics Society, Salt Lake City, Utah, July 5-9, 1987

Lubenau, J. O., J. G. Yusko, E. D. Bailey, and D. A. Nussbaumer, "Incidents Involving NORM Contaminated Materials," presented at the 19th Annual Meeting of the Conference of Radiation Control Program Directors, Inc., Boise, Idaho, May 18-21, 1987

Schell, W. R., J. C. Rosen, D. J. Strom, and J. G. Yusko, "Fallout From Chernobyl In Western Pennsylvania," presented at the Annual Conference of the Pennsylvania Public Health Association, State College, Pennsylvania, October 9-10, 1986

"Public Health Concerns Regarding a Uranium Mill Tailings Disposal Site," presented at the Annual Conference of the Pennsylvania Public Health Association, State College, Pennsylvania, October 9-10, 1986

Talbott, E. O., P. A. Murphy, L. H. Kuller, J. Yusko, R. Schmeltz, E. P. Radford, R. Doll, and C. Portocarrero, "Distribution of Thyroid Abnormalities in a Community Exposed to Gamma Radiation from a Uranium Waste Site," (to be published)

"Remedial Action at Canonsburg: A Retrospective," presented at a regular meeting of the Western Pennsylvania Chapter, Health Physics Society, Pittsburgh, Pennsylvania, March 5, 1986

"Citizen Concerns About the Canonsburg Clean-Up," guest interview for "Pittsburgh 2-Day" public and current affairs program of KDKA TV-2, Pittsburgh, Pennsylvania, program first telecast March 4, 1986

"Acceptable Risk," interview in Gau Productions documentary on Canonsburg, Gau Productions, London, England, (first telecast in 1985)

"Accidental Discoveries of Industrial Radiation Sources," presented at the 113th Annual Meeting of the American Public Health Association, Washington, D.C., November 17-21, 1985

"The Impact of an UMTRA Program on Local School Districts," presented at the 30th Annual Meeting of the Health Physics Society, Chicago, Illinois, May 25-31, 1985

"Canonsburg Site: History and Acquisition," presented at the 1985 Washington Conference on Low Level Nuclear Waste Disposal and Clean-up, Arlington, Virginia, May 16-17, 1985

"Pennsylvania Experience With Public Concerns Regarding the Canonsburg Project," presented at the Department of Energy - States - Tribes Meeting of the Uranium Mill Tailings Remedial Action Project, Meadow Lands, Pennsylvania, September 18-19, 1984

"A State's Perspective on an UMTRA Program," presented at the 29th Annual Meeting of the Health Physics Society, New Orleans, Louisiana, June 3-7, 1984

"Progress in the Canonsburg Remedial Action Program," presented at a regular meeting of the Chartiers Valley Chamber of Commerce, Bethel Park, Pennsylvania, March 24, 1983

"Hazardous Waste Classification and Disposal in a Medical Facility," presented at the "Environmental Hazards and Infection Control" Seminar of the Eastern Allegheny County Health Corporation, Pittsburgh, Pennsylvania, November 18, 1982

"The Clean-Up of an Abandoned Radium and Uranium Extraction Facility," presented at the "Management of Hazardous Waste" Symposium of the Pittsburgh Section, American Nuclear Society and the Western Pennsylvania Chapter, Health Physics Society, Pittsburgh, Pennsylvania, November 5-6, 1982

"Radiological Waste Management," presented at the "Hazardous Waste Management in Hospitals" Seminar of the Hospital Council of Western Pennsylvania, Pittsburgh, Pennsylvania, November 3, 1982

"Practical Considerations in Radiation Emergency Management," presented at a regular meeting of the Penn-Ohio Chapter, American Association of Physicists in Medicine, Pittsburgh, Pennsylvania, February 25, 1982

"The Canonsburg Problem," presented at the Western Pennsylvania District Council Conference of the International Ladies' Garment Workers' Union, Indiana, Pennsylvania, November 14, 1981

"Safety Responsibilities of Therapy Technologists," presented at the Second Annual Workshop in Radiation Therapy Technology, Penn-Ohio Chapter, American Association of Physicists in Medicine, Gibsonia, Pennsylvania, May 8-9, 1981

"Patient Exposure from Dental X-rays and its Health Implications," presented at a regular meeting of the Western Pennsylvania Dental Hygienists Association, Pittsburgh, Pennsylvania, May 6, 1981

"Canonsburg - Remedial Action Options," guest interview for "Nine News Index" public affairs program of WTOV TV-9, Steubenville, Ohio, program first telecast April 26, 1981

"Detection and Clinical Symptoms of Radiation Injuries," presented at the "Hazards in the Workplace" Seminar of the Allegheny General Hospital, Pittsburgh, Pennsylvania, April 9, 1981

"Implications of Federal Regulations on Patient Safety," presented to the Pittsburgh Area Radiology Managers Meeting, Pittsburgh, Pennsylvania, March 19, 1981

"Canonsburg - Remedial Action," guest interview for "Pittsburgh Tomorrow" public affairs program of WPGH TV-53, Pittsburgh, Pennsylvania, program first telecast July 6, 1980

"Compliance Surveys and Methods for Medical Diagnostic X-ray Equipment," presented to the Radiation Subcommittee meeting of the American Iron and Steel Institute, Pittsburgh, Pennsylvania, June 19, 1980

"Known Effects and Concerns for Low Level Environmental Radiation Exposures," presented to the Elfinwild-Shaler Nurses Unit, Glenshaw, Pennsylvania, September 15, 1979

"Nursing Personnel Radiation Doses from Radionuclide Therapy Patients," presented at the 22nd Annual Meeting of the Health Physics Society, Atlanta, Georgia, July 3-7, 1977

"Hospital Radioactive Waste Disposal," presented at the "Radioactive Waste Symposium" of the Pennsylvania State University Milton S. Hershey Medical Center, Hershey, Pennsylvania, October 1, 1976

PA AGREEMENT STATE STAFF TRAINING

| | | | |
|--|--------------|--------------------------|----------------------------------|
| Name: David J. Allard | | Date of Hire: 02/01/1999 | |
| Degree in Health Physics: M.S. Radiological Sciences and Protection, Univ. of Lowell, 1984 | | | |
| Other Degree: B.S. Environmental Sciences, SUNY at Albany, 1977 | | | |
| ABHP Certification: Yes, Comprehensive Practice, 1988 | | | |
| Professional Engineering License: No | | | |
| National Registry of Radiation Protection Technologists (NRRPT): Yes, 1980 | | | |
| | | Formal Courses | Date of Hire: 02/01/1999 |
| Training Areas | Date Planned | Date Completed | Equivalent Experience |
| | | | Supervisor sign-off |
| BASIC TRAINING | | | |
| Basic Health Physics | | 1984 | M.S., OJT since 8/77, see resume |
| Five Week Health Physics course | | 1984 | M.S., OJT since 8/77, see resume |
| Overall program orientation | | | OJT since 2/99 |
| Review of State Regulations | | | OJT since 2/99 |
| 25 Pa. Code, Art. V | | | OJT since 2/99 |
| Act 147 of 1984 | | | OJT since 2/99 |
| 10, 21, 40 and 49 CFR | | | OJT since 8/77 |
| Review of Desk Manual and Reference Material | | | OJT since 2/99 |
| Essentials of Inspection | | | OJT since 4/91 |
| Essentials of Licensing | | | OJT since 8/77 |
| Essentials of Transportation | | 1978, 1980, | OJT since 8/77 |
| Specialized Training | | | |
| Elements of Nuclear Medicine | | 1979 | OJT since 8/77 |
| Elements of Medical Therapy | | 1981 | OJT since 8/77 |
| Elements of Industrial Radiography | | | OJT since 2/99 |
| Irradiators | | | OJT since 2/99 |
| Performance Based Inspections | | 1991 | OJT since 4/91 |
| ADVANCED TRAINING | | | |
| Advanced Health Physics | | 1984 | M.S., CHP, see resume |
| Elements of Investigations/Root Cause Analysis | | 1991 | OJT since 4/91 |
| OTHER | | | |
| Radiological Emergency Response Operations (RERO) | | 2003 | |
| Advanced Radiological Incident Operations (ARIO) | | 2004 | |
| Advanced Radiological Assessment | | 1999 | |
| Boiling Water Reactor Technology | | 2000 | |
| Pressurized Water Reactor Technology | | 2001 | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|---|-----------------|--------------------------------|-----------------------|------------------------|
| Name: Dennis L. Angelo | | Date of Hire: 12/05/1985 | | |
| Degree in Health Physics: | | | | |
| Other Degree: BS Sec. Ed., SRU, 1970 & MS Organizational Leadership, Geneva College, 1999 | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | N/A | |
| Five Week Health Physics course | | | N/A | |
| Overall program orientation | | | 20+ years experience | |
| Review of State Regulations | | | 20+ years experience | |
| 25 Pa. Code, Art. V | | | 20+ years experience | |
| Act 147 of 1984 | | | 20+ years experience | |
| 10 CFR | | | 30+ years experience | |
| Review of Desk Manual and Reference Material | | | 20+ years experience | |
| Essentials of Inspection | | 09/15/2000 | | |
| Essentials of Licensing | | 10/02/1998 | | |
| Essentials of Transportation | | 05/01/1998 | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | 08/18/2000 | | |
| Elements of Medical Therapy | | 08/11/2000 | | |
| Elements of Industrial Radiography | | 08/23/2002 | | |
| Irradiators | | 04/19/2002 | | |
| Performance Based Inspections | | 06/08/2000 | | |
| Internal Dosimetry & WBC | | 11/17/2000 | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | N/A | |
| Elements of Investigations/Root Cause Analysis | | 05/18/2001 | | |
| MARSSIM | | 06/10/1999 | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | RERO 5/9/2003 & ARIO 8/22/2003 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|---|-----------------|---------------------------|---|------------------------|
| Name: James Frederick Barnhart | | Date of Hire: August 1985 | | |
| Degree in Health Physics: | | | | |
| Other Degree: Master of Science w/ thesis - Nuclear Engineering Univ. of New Mexico 1995 | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | MS Nuclear Engineering & 20 yrs BRP | |
| Five Week Health Physics course | | Oct-89 | | |
| Overall program orientation | | | MS Nuclear Engineering & 20 yrs BRP | |
| Review of State Regulations | | | MS Nuclear Engineering & 20 yrs BRP | |
| 25 Pa. Code, Art. V | | | | |
| Act 147 of 1984 | | | | |
| 10 CFR | | | | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | | MS Nuclear Engineering & 20 yrs BRP | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | | RAM Transport Course & 20 yrs BRP | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | MS Nuclear Engineering & 20 yrs BRP | |
| Elements of Investigations/Root Cause Analysis | | | MS Nuclear Engineering & 20 yrs BRP | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | | MS Nuclear Engineering & 20 yrs BRP Plume and Pos | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|-----------------|-------------------------------------|-----------------------|------------------------|
| Name: Bridget M. Craig | | Date of Hire: September 1993 | | |
| Degree in Health Physics: No | | | | |
| Other Degree: BS Biology | | | | |
| ABHP Certification: No | | | | |
| Professional Engineering License: No | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): No | | | | |
| | Formal Courses | | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | | |
| Five Week Health Physics course | | | | |
| Overall program orientation | | | | |
| Review of State Regulations | | | | |
| 25 Pa. Code, Art. V | | | | |
| Act 147 of 1984 | | | | |
| 10 CFR | | | | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | | | |
| | | | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | May-06 | | |
| | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | RERO, June 2006 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|---|-----------------|---------------------------------|---|------------------------|
| Name; Richard F. Croll | | Date of Hire: December 17, 2001 | | |
| Degree in Health Physics: | | | | |
| Other Degree: B.S.Applied Science and Technology: Radiation Protection | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): 1986, currently inactive | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | USN Engineering Laboratory Technician Training | |
| Five Week Health Physics course | | | NRRPT Cert and 32 yrs experience in Health Physics related work | |
| Overall program orientation | | | 21 yrs exp in RadCon at NRC reg facilities | |
| Review of State Regulations | | | | |
| 25 Pa. Code, Art. V | | | 1.25 yrs exp performing PA inspections | |
| Act 147 of 1984 | | | 1.25 yrs exp performing PA inspections | |
| 10 CFR | | | 21 yrs exp in RadCon at NRC reg facilities | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | | 1.25 yrs exp performing PA inspections and membership in GPUN's oversight committee for SNEC | |
| Essentials of Licensing | | 09/13/2002 | | |
| Essentials of Transportation | | | Chem Nuc US DOT courses in 1997, 2000 and RW Shipping course provided by Exelon in 2002 | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | 08/09/2002 | | |
| Elements of Industrial Radiography | | 08/23/2002 | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | | Emergency Management Institute course on Radiological Accident Assessment Concepts, 8/16/2002 | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|-----------------|---------------------------------|----------------------------|------------------------|
| Name: Terry W. Derstine | | Date of Hire: June, 1988 | | |
| Degree in Health Physics: No | | | | |
| Other Degree: BS Microbiology | | | | |
| ABHP Certification: No | | | | |
| Professional Engineering License: No | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): No | | | | |
| | Formal Courses | | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | 17 Years PA DEP BRP | |
| Five Week Health Physics course | | | 17 Years PA DEP BRP | |
| Overall program orientation | | | 17 Years PA DEP BRP | |
| Review of State Regulations | | | 17 Years PA DEP BRP | |
| 25 Pa. Code, Art. V | | | 17 Years PA DEP BRP | |
| Act 147 of 1984 | | | 17 Years PA DEP BRP | |
| 10 CFR | | | 17 Years PA DEP BRP | |
| Review of Desk Manual and Reference Material | | | 17 Years PA DEP BRP | |
| Essentials of Inspection | | Sept. 1989 | | |
| Essentials of Licensing | | Sept. 2001 | | |
| Essentials of Transportation | | April, 2001 | | |
| | | | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | March, 1999 | | |
| Elements of Medical Therapy | | March, 2000 | | |
| Elements of Industrial Radiography | | June, 1994 | | |
| Irradiators | | June, 2001 | | |
| Performance Based Inspections | | May, 2001 | | |
| | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | March, 2002 | | |
| | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | May, 1992 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|--------------|------------------------|-----------------------|---------------------|
| Name: David Gaisior | | Date of Hire: Aug 1988 | | |
| Degree in Health Physics: | | | | |
| Other Degree: BS Chemistry & Science Education | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | N/A | | |
| Five Week Health Physics course | | | | |
| Overall program orientation | | | 14 yrs experience | |
| Review of State Regulations | | | 14 yrs experience | |
| 25 Pa. Code, Art. V | | | 14 yrs experience | |
| Act 147 of 1984 | | | 14 yrs experience | |
| 10 CFR | | | 10 yrs experience | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | Jun-99 | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | May-04 | | |
| Internal Dosimetry training | | Jan-98 | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) | | | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|---|--------------|---------------------------------|-----------------------|---------------------|
| Name: Andrew T. Gardosik | | Date of Hire: November 15, 1992 | | |
| Degree in Health Physics: | | | | |
| Other Degree: B.S Environmental Science, Minor Forest Science; A.A. Civil Engineering | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | 12 yrs experience | |
| Five Week Health Physics course | | 04/03/1998 | | |
| Overall program orientation | | Dec-92 | | |
| Review of State Regulations | | | 12 yrs experience | |
| 25 Pa. Code, Art. V | | | 12 yrs experience | |
| Act 147 of 1984 | | | 12 yrs experience | |
| 10 CFR | | | 12 yrs experience | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | 05/27/1999 | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | 03/10/2000 | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | 08/13/1999 | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | 04/07/2000 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|-----------------|---------------------------------|-----------------------|------------------------|
| Name: Ronald J. Hamm | | Date of Hire: February 18, 1997 | | |
| Degree in Health Physics: | | | | |
| Other Degree: ARRT in Nuclear Medicine and Radiology; NMTCB in Nuclear Medicine; ASCP in Nuclear | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | | |
| Five Week Health Physics course | | 04/03/1998 | | |
| Overall program orientation | | | | |
| Review of State Regulations | | | | |
| 25 Pa. Code, Art. V | | | | |
| Act 147 of 1984 | | | | |
| 10 CFR | | | | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | 03/10/2000 | | |
| Essentials of Licensing | | 10/02/1998 | | |
| Essentials of Transportation | | 04/30/1999 | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | 08/21/1998 | | |
| Elements of Industrial Radiography | | 08/13/1999 | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | 04/28/2002 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|---|--------------------------|----------------------------------|--|---------------------|
| Name: Reza (Rich) Janati | | Date of Hire: August 2004 | | |
| Degree in Health Physics: Completed Several Graduate Level Training Courses in Radiation Health Phy. | | | | |
| Other Degree: Nuclear Engineering | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience: Nuclear Engineering/Nuclear Safety | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | 1988 | U Mass, PSU and GET at Power Plants | |
| Five Week Health Physics course | | | | |
| Overall program orientation | | | | |
| Review of State Regulations | | | | |
| 25 Pa. Code, Art. V | | 2004 | BRP | |
| Act 147 of 1984 | | 1984/1992 | BRP | |
| 10 CFR | | 1984 | BRP | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | 1990/2003 | Fund of Inspections & Expec for Inspectors | |
| Essentials of Licensing | | | same as above | |
| Essentials of Transportation | 1985/1986/1996/01 | | DOE/NRC/NRC/BRP RAM Transportaion | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | 2000 | NRC Region I Training for Inspectors (ROP) | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | 2003 | EPA Advanced Radiation Safety | |
| Elements of Investigations/Root Cause Analysis | | 1986 | MORT Accident/Incident Investigation | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | 1986/1993 | Rad Accident Assessment Courses (FEMA) | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|---|--------------|----------------|---------------------------------------|---------------------|
| Roy G. Kitzer | | 04/01/1996 | | |
| Degree in Health Physics: MS in Radiation Science - Rutgers -1966 | | | | |
| Other Degree: BS in Chemical Engineering - Carnegie Tech - 1956 | | | | |
| ABHP Certification: NO | | | | |
| Professional Engineering License: NO | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): NO | | | | |
| Formal Courses | | | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | May-62 | RATSEC + Oak Ridge | |
| Five Week Health Physics course | | May-62 | RATSEC - 3 month Rad Safety | |
| Overall program orientation | | | | |
| Review of State Regulations 25 Pa. Code, Art. V Act 147 of 1984 10 CFR | | | 10+ years Regulatory Compliance | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | Mar-98 | | |
| Essentials of Licensing | | Sep-01 | | |
| Essentials of Transportation | | May-98 | | |
| | | | 30+ years RSO Broad Materials License | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | Sep-99 | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | May-03 | | |
| Performance Based Inspections | | Apr-03 | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | Oct-01 | | |
| Elements of Investigations/Root Cause Analysis | | Mar-02 | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | Aug-97 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | |
|--|-----------------|------------------------------|------------------------|
| Name: Joseph A. Koshy | | Date of Hire: April 18, 1994 | |
| Degree in Health Physics: | | | |
| Other Degree: M.S. (Physicis) | | | |
| ABHP Certification: | | | |
| Professional Engineering License: | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | |
| | | Formal Courses | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience |
| | | | Supervisor sign-off |
| BASIC TRAINING | | | |
| Basic Health Physics | | N/A | |
| Five Week Health Physics course | | 04/02/1999 | |
| Overall program orientation | | Apr-97 | |
| Review of State Regulations | | | 11 Years experience |
| 25 Pa. Code, Art. V | | | 11 Years experience |
| Act 147 of 1984 | | | 11 Years experience |
| 10 CFR | | | 11 Years experience |
| Review of Desk Manual and Reference Material | | | |
| Essentials of Inspection | | | |
| Essentials of Licensing | | | |
| Essentials of Transportation | | | |
| Specialized Training | | | |
| Elements of Nuclear Medicine | | | |
| Elements of Medical Therapy | | | |
| Elements of Industrial Radiography | | | |
| Irradiators | | | |
| Performance Based Inspections | | | |
| ADVANCED TRAINING | | | |
| Advanced Health Physics | | | |
| Elements of Investigations/Root Cause Analysis | | | |
| OTHER | | | |
| Radiological Accident Assessment - Plume Phase | | 08/18/1995 | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|-----------------|--------------------------|-----------------------|------------------------|
| Tonda L. Lewis | | Date of Hire: April 1988 | | |
| Degree in Health Physics: | | | | |
| Other Degree: BS- Wildlife Science-PSU | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | | |
| Five Week Health Physics course | | Aug-95 | | |
| Overall program orientation | | | | |
| Review of State Regulations | | | | |
| 25 Pa. Code, Art. V | | | | |
| Act 147 of 1984 | | | | |
| 10 CFR | | | | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | 03/20/1992 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|-----------------|-------------------|-----------------------|------------------------|
| Robert C. Maiers | | Jan-91 | | |
| Degree in Health Physics: | | | | |
| Other Degree: A.E. Nuclear Engineering Tech., BS Environmental Engineering | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: PE-04760E | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Introductory Health Physics | | Jul-96 | | |
| Five Week Health Physics course | | | | |
| Overall program orientation | | | | |
| Review of State Regulations | | | | |
| 25 Pa. Code, Art. V | | | | |
| Act 147 of 1984 | | | | |
| 10 CFR | | | | |
| Review of Desk Manual and Reference Material | | | | |
| Fundamentals of Inspection | | Jul-94 | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | Jul-92 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|---|---------------------|---|------------------------------|----------------------------|
| Name: Meredith M. Martin | | Date of Hire in Radiation Program: March, 2006 | | |
| Degree in Health Physics: No | | | | |
| Other Degree: BS Environmental Science | | | | |
| ABHP Certification: No | | | | |
| Professional Engineering License: No | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): No | | | | |
| | Formal Courses | | | |
| <u>Training Areas</u> | <u>Date Planned</u> | <u>Date Completed</u> | <u>Equivalent Experience</u> | <u>Supervisor sign-off</u> |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | | |
| Five Week Health Physics course | | | | |
| Overall program orientation | | | Ongoing | |
| Review of State Regulations | | | Currently reviewing | |
| 25 Pa. Code, Art. V | | | " | |
| Act 147 of 1984 | | | " | |
| 10 CFR | | | " | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | May 26, 2006 | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | June 5-9, 2006 | | | |

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|-----------------|-----------------------|------------------------------|------------------------|
| Name: Delvy McElwain | | Date of Hire: 2/25/02 | | |
| Degree in Health Physics: | | | | |
| Other Degree: B.S. Physics/Math | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | | |
| Five Week Health Physics course | | | | |
| Overall program orientation | 2002 | 2003 | | |
| Review of State Regulations | 2002 | 2003 | | |
| 25-Pa. Code, Art. V | 2002 | 2003 | | |
| Act 147 of 1984 | 2002 | 2003 | | |
| 10 CFR | 2002 | 2003 | | |
| Review of Desk Manual and Reference Material | 2002 | 2003 | | |
| Essentials of Inspection | 2003 | 2004 | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | 30 + related work experience | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | 2002 | 2003 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|-----------------|--------------------------|-----------------------|------------------------|
| Name: Frank Pepper | | Date of Hire: March 1992 | | |
| Degree in Health Physics: | | | | |
| Other Degree: Bachelor of Science, Geography | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | | |
| Five Week Health Physics course | | | | |
| Overall program orientation | | Apr-92 | | |
| Review of State Regulations | | | 13 years experience | |
| 25 Pa. Code, Art. V | | | 13 years experience | |
| Act 147 of 1984 | | | | |
| 10 CFR | | | 13 years experience | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | Mar-98 | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | Mar-00 | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| Name: Joseph A. Pryber | | Date of Hire: 12/90 | | |
|--|--------------|---------------------|-----------------------|---------------------|
| Degree in Health Physics: | | | | |
| Other Degree: B.A. Biology-Environmental Science Concentration | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | N/A | | |
| Five Week Health Physics course | | 04/02/1999 | | |
| Overall program orientation | | Dec-90 | | |
| Review of State Regulations | | | 14 years experience | |
| 25 Pa. Code, Art. V | | | 14 years experience | |
| Act 147 of 1984 | | | 14 years experience | |
| 10 CFR | | | 14 years experience | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | 03/16/2001 | | |
| Essentials of Licensing | | 10/01/1999 | | |
| Essentials of Transportation | | 06/29/2001 | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | 14 years experience | |
| Elements of Medical Therapy | | 08/20/1999 | | |
| Elements of Industrial Radiography | | 05/14/1999 | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | 10/29/1999 | | |
| Elements of Investigations/Root Cause Analysis | | 07/14/2000 | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) H-303 | | 03/20/1992 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|-----------------|--------------------------|-----------------------|------------------------|
| Name: Chris Rittiger | | Date of Hire: 12/12/1985 | | |
| Degree in Health Physics: | | | | |
| Other Degree: B.S. Biology | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | | |
| Five Week Health Physics course | | | | |
| Overall program orientation | 1985 | 1986 | | |
| Review of State Regulations | 1985 | 1986 | | |
| 25 Pa. Code, Art. V | 1985 | 1986 | | |
| Act 147 of 1984 | 1985 | 1986 | | |
| 10 CFR | 1985 | 1986 | | |
| Review of Desk Manual and Reference Material | 1985 | 1986 | | |
| Essentials of Inspection | 1997 | 1998 | | |
| Essentials of Licensing | 1997 | 1998 | | |
| Essentials of Transportation | 1997 | 1998 | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | 1997 | 1998 | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | 1999 | 2000 | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|---|-----------------|-------------------------|-----------------------|------------------------|
| Name: Kurt Rutzmoser | | Date of Hire: June 1992 | | |
| Degree in Health Physics: | | | | |
| Other Degree: B.S. Comprehensive Science | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | | |
| Five Week Health Physics course | | | | |
| Overall program orientation | | | 9 years experience | |
| Review of State Regulations | | | 9 years experience | |
| 25 Pa. Code, Art. V | | | | |
| Act 147 of 1984 | | | | |
| 10 CFR | | | | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | 03/09/1998 | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | 03/05/1996 | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | 08/18/2000 | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | 04/19/2002 | | |
| Performance Based Inspections | | 04/25/2002 | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | 09/25/1998 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | |
|---|--------------|--------------------------|--------------------------|
| Name: Dwight Shearer | | Date of Hire: 07/11/1994 | |
| Degree in Health Physics: | | | |
| Other Degree: B.S. Environmental Engineering, B.S. Chemistry, Sec Ed. | | | |
| ABHP Certification: | | | |
| Professional Engineering License: PE056003 | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | |
| | | Formal Courses | Date of Hire: 07/11/1994 |
| Training Areas | Date Planned | Date Completed | Equivalent Experience |
| | | | Supervisor sign-off |
| BASIC TRAINING | | | |
| Basic Health Physics | | | |
| Five Week Health Physics course | | | |
| Overall program orientation | 1994 | 1995 | |
| Review of State Regulations | 1994 | 1995 | |
| 25 Pa. Code, Art. V | 1994 | 1995 | |
| Act 147 of 1984 | 1994 | 1995 | |
| 10 CFR | 1994 | 1995 | |
| Review of Desk Manual and Reference Material | 1994 | 1995 | |
| Essentials of Inspection | 1997 | 1998 | |
| Essentials of Licensing | 1997 | 1998 | |
| Essentials of Transportation | 1997 | 1998 | |
| | | | |
| Specialized Training | | | |
| Elements of Nuclear Medicine | 1997 | 1998 | |
| Elements of Medical Therapy | | | |
| Elements of Industrial Radiography | 1997 | 1998 | |
| Irradiators | 2002 | 2003 | |
| Performance Based Inspections | | | |
| | | | |
| ADVANCED TRAINING | | | |
| Advanced Health Physics | | | |
| Elements of Investigations/Root Cause Analysis | | | |
| | | | |
| OTHER | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | 1994 | 1995 | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| Name: Charley M. Smalls | | | Date of Hire: September 2, 2000 | | |
|---|----------------|--------------|---------------------------------|-----------------------|---------------------|
| Degree in Health Physics: No | | | | | |
| Other Degree: M.S. Zoology, B.S. | | | | | |
| ABHP Certification: No | | | | | |
| Professional Engineering License: No | | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): No | | | | | |
| | Formal Courses | | | | |
| Training Areas | Course | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | | |
| Basic Health Physics | | | | | |
| Five Week Health Physics course | H-109 | | | | |
| Overall program orientation | | | 09/28/2000 | | |
| Review of State Regulations | | | | Yes | |
| 25 Pa. Code, Art. V | | | | Yes | |
| Act 147 of 1984 | | | | | |
| 10 CFR | | | | Yes | |
| Review of Desk Manual and Reference Material | | | | Yes | |
| Essentials of Inspection | G-108 | | | | |
| Essentials of Licensing | G-109 | | 09/09/2002 | | |
| Essentials of Transportation | H-308 | | | | |
| Specialized Training | | | | | |
| Elements of Nuclear Medicine | H-304 | | 03/03/2003 | | |
| Elements of Medical Therapy | H-313 | | 03/10/2003 | | |
| Elements of Industrial Radiography | H-305 | | | | |
| Irradiators | H-315 | | | | |
| Performance Based Inspections | G-304 | | | | |
| ADVANCED TRAINING | | | | | |
| Advanced Health Physics | H-201 | | | | |
| Elements of Investigations/Root Cause Analysis | G-205 | | | | |
| OTHER | | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | 301 or 302 | | | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| Name: Louis Ray Urciuolo | | | Date of Hire: January 5, 1979 | | |
|---|----------------|--------------|-------------------------------|-----------------------|---------------------|
| Degree in Health Physics: Yes: MS -1974 University of Florida, Gainesville FL | | | | | |
| Other Degree: BS - 1971 Astrophysics, Tufts Univ, Medford MA | | | | | |
| ABHP Certification: No | | | | | |
| Professional Engineering License: No | | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): No | | | | | |
| | Formal Courses | | | | |
| Training Areas | Course | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | | |
| Basic Health Physics | H-122 | | | Yes | |
| Five Week Health Physics course | H-109 | | | Yes | |
| Overall program orientation | | | 1975 | Yes | |
| Review of State Regulations | | | | Yes | |
| 25 Pa. Code, Art. V | | | | Yes | |
| Act 147 of 1984 | | | | Yes | |
| 10 CFR | | | | Yes | |
| Review of Desk Manual and Reference Material | | | | Yes | |
| Essentials of Inspection | G-108 | | 08/05/1983 | | |
| Essentials of Licensing | G-109 | | 06/07/1996 | | |
| Essentials of Transportation | H-308 | | 05/01/1998 | | |
| Specialized Training | | | | | |
| Elements of Nuclear Medicine | H-304 | | | Yes | |
| Elements of Medical Therapy | H-313 | | 03/20/1998 | | |
| Elements of Industrial Radiography | H-305 | | 05/09/1994 | | |
| Irradiators | H-315 | | | | |
| Performance Based Inspections | G-304 | | | Yes | |
| Health Physics Topical Review - HDRs | H-401 | | 02/20/1996 | | |
| ADVANCED TRAINING | | | | | |
| Advanced Health Physics | H-201 | | | | |
| Elements of Investigations/Root Cause Analysis | G-205 | | | Yes | |
| Health Physics Engineering | H-118 | | 08/16/1996 | | |
| OTHER | | | | | |
| Radiological Emergency Response Operations (RERO) | H-303 | | 07/30/1988 | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| Name: Bryan Werner | | Date of Hire: 9/11/00 | | |
|---|----------------|-----------------------|--|---------------------|
| Degree in Health Physics: MS Radiological Science and Protection, Umass Lowell May 2000 | | | | |
| Other Degree: BS from Dickinson College Major: Physics Minor: Math May 1998 | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | Formal Courses | | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | College, Graduate School, and 5 years Experience | |
| Five Week Health Physics course | | | College, Graduate School, and 5 years Experience | |
| Overall program orientation | | Sep-00 | | |
| Review of State Regulations | | | 5 yrs Experience | |
| 25 Pa. Code, Art. V | | | 5 yrs Experience | |
| Act 147 of 1984 | | | 5 yrs Experience | |
| 10 CFR | | | 5 yrs Experience | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | Graduate School | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|-----------------|---------------------------------|----------------------------------|------------------------|
| Name: Whitehead, Jeffrey L. | | Date of Hire: December 17, 2001 | | |
| Degree in Health Physics: | | | | |
| Other Degree: BS- Nuclear Technology | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): 1981 | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | Mar-76 | Navy Eng. Lab. Technician School | |
| Five Week Health Physics course | | Mar-76 | Navy Eng. Lab. Technician School | |
| Overall program orientation | | Dec-01 | | |
| Review of State Regulations | | | 3 yrs experience | |
| 25 Pa. Code, Art. V | | | 3 yrs experience | |
| Act 147 of 1984 | | | 3 yrs experience | |
| 10 CFR | | | 3 yrs experience | |
| Review of Desk Manual and Reference Material | | | | |
| Essentials of Inspection | | | | |
| Essentials of Licensing | | | | |
| Essentials of Transportation | | | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | Apr-02 | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | Mar-03 | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | | |
|---|------------|--------------|-------------------------|-----------------------|---------------------|
| Name: Stephen E. Williams, Sr. | | | Date of Hire: 8/16/2000 | | |
| Degree in Health Physics: BS Radiological Health Duquesne University | | | | | |
| Other Degree: MS Environmental Pollution Control abd Penn State University | | | | | |
| ABHP Certification: No | | | | | |
| Professional Engineering License: No | | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): No | | | | | |
| Formal Courses | | | | | |
| Training Areas | Course | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | | |
| Basic Health Physics | H-122 | | | yes | |
| Five Week Health Physics course | H-109 | | | yes | |
| Overall program orientation | | | | yes | |
| Review of State Regulations | | | | yes | |
| 25 Pa. Code, Art. V | | | | yes | |
| Act 147 of 1984 | | | | yes | |
| 10 CFR | | | | yes | |
| Review of Desk Manual and Reference Material | | | | | |
| Essentials of Inspection | G-108 | | | yes | |
| Essentials of Licensing | G-109 | | | yes | |
| Essentials of Transportation | H-308 | | | yes | |
| Specialized Training | | | | | |
| Elements of Nuclear Medicine | H-304 | | | | |
| Elements of Medical Therapy | H-313 | | | | |
| Elements of Industrial Radiography | H-305 | | | yes | |
| Irradiators | H-315 | | | | |
| Performance Based Inspections | G-304 | | | yes | |
| ADVANCED TRAINING | | | | | |
| Advanced Health Physics | H-201 | | | yes | |
| Elements of Investigations/Root Cause Analysis | G-205 | | | yes | |
| OTHER | | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | 301 or 302 | | | yes | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| Name: Scott L. Wilson | | | Date of Hire: 6/14/2004 | | |
|---|----------------|--------------|-------------------------|---|---------------------|
| Degree in Health Physics: YES. Associate in Science - Radiation Protection Technology | | | | | |
| Other Degree: Bachelor in Science (Business Administration) | | | | | |
| ABHP Certification: NO | | | | | |
| Professional Engineering License: NO | | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): YES - 1998 | | | | | |
| | Formal Courses | | | | |
| Training Areas | Course | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | | |
| Basic Health Physics | H-122 | | | Yes | |
| Five Week Health Physics course | H-109 | | | Yes | |
| Overall program orientation | | | | Yes | |
| Review of State Regulations | | | | Yes | |
| 25 Pa. Code, Art. V | | | | Yes | |
| Act 147 of 1984 | | | | Yes | |
| 10 CFR | | | | Yes | |
| Review of Desk Manual and Reference Material | | | | Yes | |
| Essentials of Inspection | G-108 | | | Yes | |
| Essentials of Licensing | G-109 | ##### | | | |
| Essentials of Transportation | H-308 | TBD/2006 | | | |
| Specialized Training | | | | | |
| Elements of Nuclear Medicine | H-304 | TBD/2006 | | | |
| Elements of Medical Therapy | H-313 | | | | |
| Elements of Industrial Radiography | H-305 | TBD/2006 | | | |
| Irradiators | H-315 | | | | |
| Performance Based Inspections | G-304 | | | | |
| ADVANCED TRAINING | | | | | |
| Advanced Health Physics | H-201 | 10/17/2005 | 10/28/2005 | | |
| Elements of Investigations/Root Cause Analysis | G-205 | | | Yes | |
| OTHER | | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | 301 or 302 | | | 18 years Nuclear Power Experience including required emergency response training for NPP Field Team Member, OSC Coordinator, NRC Communicator, Field Team Communicator, ERDS, including 12 months experience as NPP Emergency Preparedness Coordinator. Radiological Accident Assessment Concepts (E341) Scheduled. | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|--|-----------------|--------------------------|-----------------------|------------------------|
| Name: Roy Woods | | Date of Hire: 03/21/1988 | | |
| Degree in Health Physics: | | | | |
| Other Degree: | | | | |
| ABHP Certification: | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | | | |
| Five Week Health Physics course | | | | |
| Overall program orientation | 1988 | 1989 | | |
| Review of State Regulations | 1988 | 1989 | | |
| 25 Pa. Code, Art. V | 1988 | 1989 | | |
| Act 147 of 1984 | 1988 | 1989 | | |
| 10 CFR | 1988 | 1989 | | |
| Review of Desk Manual and Reference Material | 1988 | 1989 | | |
| Essentials of Inspection | 1997 | 1998 | | |
| Essentials of Licensing | 1997 | 1998 | | |
| Essentials of Transportation | 1997 | 1998 | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | | |
| Elements of Medical Therapy | | | | |
| Elements of Industrial Radiography | | | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | | | |

The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

PA AGREEMENT STATE STAFF TRAINING

| | | | | |
|---|--------------|-----------------------------|-----------------------|---------------------|
| Name: James G. Yusko | | Date of Hire: March 3, 1980 | | |
| Degree in Health Physics: M.Sc., Radiation Health, University of Pittsburgh, Pittsburgh, Pennsylvania, 1975 | | | | |
| Other Degree: B.S., Physics, Carnegie Mellon University; Pittsburgh, Pennsylvania, 1971 | | | | |
| ABHP Certification: Comprehensive Certification; originally certified 1980; Certification extended through 2008 | | | | |
| Professional Engineering License: | | | | |
| National Registry of Radiation Protection Technologists (NRRPT): | | | | |
| | | Formal Courses | | |
| Training Areas | Date Planned | Date Completed | Equivalent Experience | Supervisor sign-off |
| BASIC TRAINING | | | | |
| Basic Health Physics | | N/A | | |
| Five Week Health Physics course | | N/A | | |
| Overall program orientation | | March, 1980 | | |
| Review of State Regulations | | March, 1980 | see also resume | |
| 25 Pa. Code, Art. V | | May, 1974 | | |
| Act 147 of 1984 | | March, 1980 | | |
| 10 CFR | | May, 1974 | | |
| Review of Desk Manual and Reference Material | August, 2005 | | | |
| Essentials of Inspection | | 1988 | | |
| Essentials of Licensing | | 1998 | | |
| Essentials of Transportation | | 1998 | | |
| Specialized Training | | | | |
| Elements of Nuclear Medicine | | | 31 years experience | |
| Elements of Medical Therapy | | | 30 years experience | |
| Elements of Industrial Radiography | | 1994 | | |
| Irradiators | | | | |
| Performance Based Inspections | | | | |
| ADVANCED TRAINING | | | | |
| Advanced Health Physics | | | | |
| Elements of Investigations/Root Cause Analysis | | | | |
| OTHER | | | | |
| Radiological Emergency Response Operations (RERO) or Advanced Radiological Incident Operations (ARIO) | | | | |

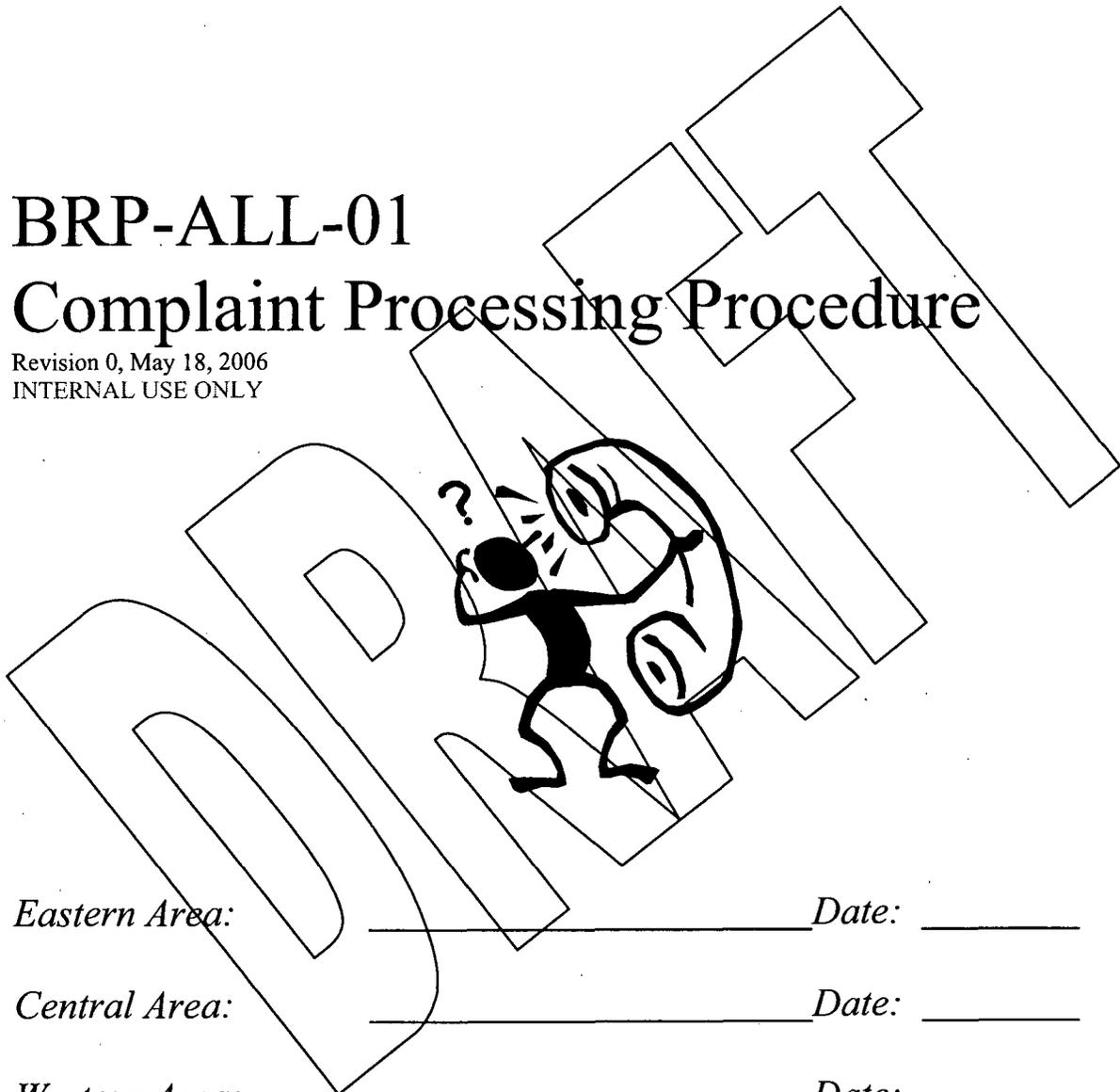
The terms "essential" and "elements" include on the job training and supervisory accompaniments, as appropriate.

Pennsylvania Department of
Environmental Protection
Bureau of Radiation Protection

BRP-ALL-01

Complaint Processing Procedure

Revision 0, May 18, 2006
INTERNAL USE ONLY



Eastern Area: _____ *Date:* _____

Central Area: _____ *Date:* _____

Western Area: _____ *Date:* _____

Bureau Director: _____ *Date:* _____

1.0 INTRODUCTION

The eFACTS Complaint Tracking System Abbreviated User's Guide defines a complaint as "a discrete instance of communication to DEP by the public or other source describing an alleged event, incident, wrong doing, or concern which is perceived as a threat to life or the environment, and/or believed to violate environmental law between a client and DEP."

The NRC defines allegation as "a declaration, statement, or assertion of impropriety or inadequacy associated with NRC regulated activities, the validity of which has not been established. This term includes all concerns identified by sources such as individuals or organizations, and technical audit efforts from Federal, State, or local government offices regarding activities at a licensee's site. Excluded from this definition are inadequacies provided to NRC staff by licensee employees acting in their official capacity, matters being handled by more formal processes such as 10 CFR 2.206 petitions, misconduct by NRC employees or NRC contractors; nonradiological occupational health and safety issues; matters reported to the NRC by Agreement States resulting from Agreement State inspections or licensing activities that are forwarded to NRC as a matter of conducting official business, and matters involving law enforcement and other Government agencies."

For the purposes of this procedure the Radiation Protection Program will consider complaints and allegations to be synonymous. In this procedure, the term "complaint" will be used. Furthermore any concern raised by any individual regarding activities within the Commonwealth will be entered into the Complaint Tracking System (CTS) per the CTS Guidance.

1.1 Scope

The scope of this document is the handling of complaints relating to radiation, radiation sources, radioactive material or radiation producing machines against any entity within the Commonwealth of Pennsylvania. Examples within Radiation Protection include, but are not limited to, radioactive materials licensees, accelerator licensees, X-ray registrants, and other facilities where radiation sources are located or used.

1.2 Definitions

For the purposes of this procedure the definition of complaint shall include both the eFACTS Complaint Tracking System Abbreviated User's Guide and the NRC Management Directive 8.8 definitions. In instances where the two definitions

conflict the more broad should apply. Furthermore, it shall be expanded to include concerns for threats to safety and property.

2.0 Processing a Complaint

2.1 Complaints Received in Central Office

The staff person receiving the information shall record all relevant information and forward it to the relevant Regional Office CTS Coordinator with the relevant Regional Radiation Protection Program Manager (RPPM) on cc. The Regional Office CTS Coordinator shall follow Department guidance on managing complaints, including the handling of correspondence associated with the complaint.

2.2 Complaints Received by the Program in Regional Offices

The staff person receiving the information shall record all relevant information and forward it to the relevant Regional Office CTS Coordinator with the relevant Regional Radiation Protection Program Manager on cc. The Regional Office CTS Coordinator shall follow Department guidance on managing complaints, including the handling of correspondence associated with the complaint.

3.0 Complainant Protection

3.1 Anonymity

Should the complainant request anonymity, his/her name and contact information shall be collected but NOT entered into the CTS. In such instances the complainant name and contact information shall be recorded on paper along with the related Complaint ID number and stored with the Regional CTS Coordinator until the complaint is closed. When the complaint is closed, the paper record shall be marked confidential and placed in the related facility file.

3.2 Whistleblower

The Program will make every effort to facilitate compliance with the Pennsylvania Whistleblower Act (Act 169 of 1986).

4.0 Procedure

Upon receipt of the complaint from the CTS Coordinator or from (regional) staff, the Regional Radiation Protection Program Manager (RPPM) will make an initial evaluation of the complaint, and, as necessary, assign regional staff to investigate the matter. This investigation may involve contacting the complainant and obtaining additional information as necessary, and may require a visit to the complainant, the facility, or any location identified in the complaint. As necessary, the regional staff member may conduct a special investigation of the regulated entity or the facility, gathering information to determine whether any threat to life, property or the environment occurred, is occurring, or might occur.

Upon completion of the investigation, the assigned regional staff member will document the investigation, and review it with his/her supervisor and the RPPM. The regional staff member will document the investigation in eFACTS, and start any inspection-related public documents (such as a letter to the regulated entity concerning the results of the investigation, if concluded). The RPPM will forward a summary of the investigation to the regional CTS Coordinator to close out the complaint. The CTS Coordinator will handle correspondence with the complainant concerning the results of the investigation, following the guidance in the Complaint Tracking System guidance and Departmental protocols.

4.1 Procedure for Complaints Against Program Personnel

All complaints against Commonwealth employees are to be directed immediately to the employee's supervisor and are NOT to be entered into the CTS. In accordance with the Department of Environmental Protection (DEP) Supervisor's Guide to Progressive Discipline, the supervisor shall contact the DEP Bureau of Human Resources to coordinate an investigation and any subsequent disciplinary action.

5.0 References

Complaint Tracking System Guidance (April 26, 2001)

eFACTS Complaint Tracking System Abbreviated User's Guide (July 6, 2004)

NRC Management Directive 8.8 (Management of Allegations)

NRC SA-300 (Reporting Material Events)

PA Right to Know Act (159 of 1984)

PA Whistleblower Act (169 of 1986)

PA Management Directive 205.16 (Whistleblower Act Compliance)

Health Insurance Portability and Accountability Act of 1996 (HIPAA)

DEP Supervisor's Guide to Progressive Discipline – available at:

(<http://intrabhr.pader.gov/ersd/DisciplineandAppeals/Discipline%20Homepage.htm>)

INITIAL NOTIFICATION PROCEDURE FOR RADIOLOGICAL INCIDENTS

PURPOSE:

This procedure describes the initial notification of BRP/DEP personnel for Non – Nuclear Plant Radiological Incidents

REFERENCES:

1. Telephone numbers for notification are found in BRP-ER-5A, “BRP Emergency Telephone Directory”

NOTIFICATIONS:

The BRP Bureau Director is notified of all incidents and will determine if additional notifications are necessary.

A. INITIAL NOTIFICATION OF THE RADIOLOGICAL INCIDENT IS FROM PEMA TO BRP.

1. Upon notification from PEMA, the BRP Initial Contact will:
 - 1.1 Receive the information shown on Attachment 1.
 - 1.2 Notify the BRP Bureau Director and brief using the information from Attachment 1.
 - 1.3 Notify the RC Division Chief and the EP Section Chief
2. Upon notification from the BRP Initial Contact, the Bureau Director will:
 - 2.1 Notify the appropriate BRP Regional Manager
 - 2.2 When practical, notify the DEP Deputy Secretary for Waste, Air and Radiation Management
3. Upon notification from the BRP Initial Contact, the RC Division Chief will:
 - 3.1 Call the BRP Bureau Director for additional instructions and information

4. Upon notification from the BRP Initial Contact, the BRP EP Section Chief will:
 - 4.1 Notify the DEP Emergency Response Director
 - 4.2 Contact the BRP Bureau Director for additional instructions.

B. INITIAL NOTIFICATION OF THE RADIOLOGICAL INCIDENT IS FROM THE INCIDENT LOCATION TO BRP.

1. Upon notification from the incident location, the BRP Initial Contact will:
 - 1.1 Receive the information shown on Attachment 1.
 - 1.2 Using the information from Attachment 1

Notify the BRP Bureau Director.
Notify the RC Division Chief and the EP Section Chief
Notify PEMA
2. Upon notification from the BRP Initial Contact, the Bureau Director will:
 - 2.1 Notify the appropriate BRP Regional Manager
 - 2.2 When practical, notify the DEP Deputy Secretary for Waste, Air and Radiation Management
3. Upon notification from the BRP Initial Contact, the RC Division Chief will:
 - 3.1 Call the BRP Bureau Director for additional instructions and information
4. Upon notification from the BRP Initial Contact, the BRP EP Section Chief will:
 - 4.1 Notify the DEP Emergency Response Director
 - 4.2 Contact the BRP Bureau Director for additional instructions.

C. INITIAL NOTIFICATION OF THE RADIOLOGICAL INCIDENT IS FROM WITHIN DEP TO BRP.

1. Upon notification from the DEP program, the BRP Initial Contact will:
 - 1.1 Receive the information shown on Attachment 1.
 - 1.3 Using the information from Attachment 1

Notify the Bureau Director.
Notify the RC Division Chief and the EP Section Chief
Notify PEMA
2. Upon notification from the BRP Initial Contact, the Bureau Director will:
 - 2.1 Notify the appropriate BRP Regional Manager
 - 2.2 When practical, notify the DEP Deputy Secretary for Waste, Air and Radiation Management
3. Upon notification from the BRP Initial Contact, the RC Division Chief will:
 - 3.1 Call the BRP Bureau Director for additional instructions and information
4. Upon notification from the BRP Initial Contact, the BRP EP Section Chief will:
 - 4.1 Notify the DEP Emergency Response Director
 - 4.2 Contact the BRP Bureau Director for additional instructions.

ATTACHMENT 1
Notification of Radiological Incident
EMERGENCY NOTIFICATION REPORT

1. This is: _____ at _____
My phone number is: _____ the time is _____

2. Origin of Call:

| | |
|------------------------------------|-----------------------------|
| County EMA | County 911 |
| Responsible Party | DEP Emergency Response Team |
| DEP Bureau of Radiation Protection | Citizen |

Contact Name: _____ Phone Number: _____
Time: _____ Date: _____ (To be used by DEP/BRP for call back)
Responsible Party _____ Address _____
Phone Number _____

3. Brief Description of the Event:

Radiological Information (Radioactive material, amount of Radioactivity, Dose Rate, releases, etc.)

4. Type of Incident: (Check & Annotate where necessary)

Transportation Fixed Facility Other _____
Location of Incident: County _____ Municipality _____
Address of Incident: _____

5. Additional Information: (Circle Where Applicable)

Emergency Response Guide Used from NAERG 2000 (162, 163, 164, 165, 166)

| | |
|----------------------------|---------------|
| Injuries Involved | Yes/No or N/A |
| Shipping Papers Accessible | Yes/No or N/A |
| Shipper Notified | Yes/No or N/A |
| Packaging Compromised | Yes/No or N/A |
| Waterway(s) Affected | Yes/No or N/A |
| Secondary Hazards* | Yes/No or N/A |

*If yes note here _____

Radioactive Materials Program Procedure Radiological Incident Response

1.0 PURPOSE

1.1 The following statements describe the applicability and purpose of this procedure. The procedure:

- 1.1.1 Applies to all Bureau of Radiation Protection (BRP) staff or Regional Office Radiation Protection (RP) staff responding to a non-nuclear power plant incident involving real or suspected radioactive materials. This procedure does not apply to a known or suspected terrorist incident.
- 1.1.2 Addresses preparations for responding to a radiological incident.
- 1.1.3 Describes appropriate radiation detection instruments and other equipment potentially required for use during a response to a radiological incident.
- 1.1.4 Describes safety precautions for RP staff and other responders during a response effort.
- 1.1.5 Describes options for identifying unknown radioactive material in the field.
- 1.1.6 Establishes guidelines for managing, including impounding, radioactive material that is, or could be, a threat to public health and safety.
- 1.1.7 Describes management options for radioactive material.
- 1.1.8 Addresses event reporting requirements and methods.

1.2 References

- 1. BRP-ER-6.01 – Field Team Operations
- 2. BRP-ER-6.02 – Emergency Equipment Operational Checks and Maintenance
- 3. BRP-ER-6.04 – Radiological Rapid Response Vehicle Operation
- 4. BRP-ER-6.09 – Dedicated Field Team Response Vehicle Operation
- 5. BRP-ER-5.03 – Initial Notification for Radiological Incidents
- 6. BRP-RM-03 - The Nuclear Materials Event Database
- 7. SA-300 - STP Procedure, Reporting Material Events, Appendix; Handbook on Nuclear Event Reporting in the Agreement States, March 2006.
- 8. 25 Pa Code 219 Subchapter M.

2.0 RESPONSIBILITIES

2.1 BRP Radiological Controls Division

- Maintains the incident response reports, forms and analysis results in hard copy files.

2.2 Initial Contact

- Makes notifications and complies with BRP-ER-5.03

NOTE: Any notifications that are required to be made immediately by the licensee should be made to PEMA, and from PEMA to the BRP Initial Contact

- Responds to incidents involving radioactive materials, as directed by BRP Bureau Director or RP Regional Manager.

2.3 BRP Bureau Director or RP Regional Manager

- Receives initial notification of radiological incidents and determines level of response required.
- Makes notifications and complies with BRP-ER-5.03.
- Bureau Director or their designee determines who takes the role of Radiological Assessment Director, which is the lead role in coordinating the response to incidents involving radioactive materials.
- Determine the level of response required. Factors that should be considered include:
 - Potential to escalate
 - Location of incident
 - Impact on routine public life or available services
 - Potential for exposure or contamination
 - Media interest
 - Type of release
 - Involvement of other responders
 - Request for specific type of assistance

2.4 Radiation Control Division Chief

- Calls the BRP Bureau Director or RP Regional Manager for additional instructions and information, and provide assistance as needed
- Makes decisions to impound radioactive materials found in the public domain with concurrence of the BRP Bureau Director.
- May approve impoundment of radioactive materials.
- Prepares a report documenting the incident response, including all forms, surveys and analysis results.
- Recommends to the BRP Bureau Director if legal assistance is required.
- Ensures that notifications are made of reportable events and required reports, as specified in Attachment 3 of this procedure, 25 Pa Code 219 Subchapter M (Reports), STP Procedure SA-300 and Handbook entitled "Nuclear Materials Event Reporting in Agreement States," to the NRC Operations Center and Region I Office for immediate and 24-hour reports, or the Region I Office for 30-day reports.
- Ensures that written documentation of reportable incidents is provided to the Region I office and NMED within 30 days of receipt of the report from licensee. Abnormal occurrences should be identified using the criteria in STP Procedure SA-300 and Handbook entitled "Nuclear Materials Event Reporting in Agreement States.
- Ensures an information notice is published or delivered to licensees, manufacturers, other state and federal radiation control regulators, etc of any situations or events that may occur at other sites.

2.5 Emergency Response Section Chief

- Assigns Central Office staff to respond to incidents involving radioactive materials as needed.
- Coordinates response effort, in cooperation with the Radiological Assessment Director.
- Maintains communications with incident scene and updates Pennsylvania Emergency Management Agency
- Assigns staff to respond to State Emergency Operations Center as requested.

3.0 PROCEDURE

3.1 Initial Notification

- 3.1.1 Perform steps in BRP-ER-5.03 – Initial Notification Procedure for Radiological Incidents
- 3.1.2 Advise the caller on proper measures to limit exposure and minimize the spread of contamination.

3.2 On Scene Response

- 3.2.1 A minimum of two people shall respond to a radiological incident.
- 3.2.2 All equipment and instrumentation necessary to respond to a radioactive materials incident is identified in BRP-ER-6.02.

Note: Prior to use, all instruments shall be operationally checked in accordance with BRP-ER-6.02..

In addition to the equipment in BRP-ER-6.02 the following should be taken to the scene

- a. A multi-channel analyzer if the situation may require a field identification of unknown isotopes.
- b. Camera
- c. Cellular phone.
- d. Other instruments and supplies, as necessary.

3.2.3 Site Approach

- Approach the incident site/material from upwind.
- Turn on exposure rate instrument before approaching the incident site.
- Obtain current information from on scene personnel.
- Coordinate response efforts prior to approaching the material.
- Ask for a shipping manifest if a transportation incident.
- If there is the potential for contamination, wear plastic booties and gloves.
- Establish a 1 mR/hr exclusion zone around the material if not already done. Determine who may enter the exclusion zone and under what conditions.

3.2.4 Document the following, as it occurs, in the logbook provided in the 'response kit':

- Date and time of all major activities related to the incident.
- Model and serial numbers of all instruments used.
- Names of RP responders.
- A physical description of the incident site.
- Location or orientation of any materials.
- Background radiation levels.
- Survey results.
- Amount of material present.
- Any markings or inscriptions associated with the material.
- Disposition of the material.
- Names, phone numbers and addresses of all individuals involved, in case follow-up is required.

3.2.5 Determine if material needs packaging.

Note: If material must be bagged, double bag the material with a minimum of one MIL-SPEC bag being the outermost bag. Seal bags with tape. Attach a completed radioactive-material tag to the outside bag, including activity, isotopes and radiation readings.

3.2.6 After the material has been safely packaged or ensured to be in safe condition, do the following:

- Determine best location for temporary storage.
- Ensure that decontamination issues are addressed.
- Initiate attempt to locate owner of material.
- Contact Radiation Controls Division Chief (primary) or Radiological Assessment Director (secondary) for direction and authorization for management of the material (See Attachment BRP-ER-6.10 Attachment 1, Radiological Incident Response Impoundment Guidelines).
- If the material is verified as NRC licensed material, notify via the 24-hour NRC Operations Center (301-816-5100).
- If no owner can be found, notify EPA Region 3 (1-800-438-2474) for possible assistance in disposing of the material, if appropriate.

3.2.7 Materials being transported for analysis or storage should be packaged to meet DOT requirements if practical.

Note: DOT exemptions should be used for scrap and waste shipments containing unidentified radioactive material.

3.3 Report

- 3.3.1 The Radiological Assessment Director or designee prepares a draft report within 15 days documenting all information gathered, the disposition of the material, and a list of all the parties involved. The report is required for all incident response, including phone consultation for reportable incidents. The draft report shall be in memo form and addressed to the Radiation Controls Division Chief. After review and concurrence, the final report shall be issued within 15 days.
- 3.3.2 Provide a copy of the final report to the BRP Bureau Director.
- 3.3.3 If required by Radiation Controls Division Chief, input incident data to the Nuclear Material Events Database (NMED) and forward event reports to the NRC.
 - 3.3.3.1 Attachment 2 contains the minimum information required for event reports to NMED.
 - 3.3.3.2 For guidance on forwarding reports to the NRC and NMED, refer to BRP-RM-03, Nuclear Materials Event Database and STP Procedure SA-300 and Handbook entitled "Nuclear Materials Event Reporting in Agreement States."
- 3.3.4 If the event involved materials, devices, or actions that have generic implications and may occur at other sites, an information notice should be initiated to inform licensees, manufacturers, and/or state and federal radiation control regulators.

3.4 Follow-up

- 3.4.1 Inventory and re-supply emergency kits and return to state of readiness in accordance with BRP-ER-6.02.
- 3.4.2 In consultation with Radiation Controls Division Chief, determine if any whole body counts, bioassays or personnel dose determinations are warranted.
- 3.4.3 In consultation with Radiation Controls Division Chief, determine if training or information for any individuals involved in the incident is warranted.
- 3.4.4 Ensure all follow-up actions, notifications, and reports are completed and documented.

4.0 RECORDS

4.1 Hardcopy

- 4.1.1 Incident Notification Form
- 4.1.2 Sheets completed from logbook provided in "Equipment Response Kit"
- 4.1.3 Report on Incident

4.2 Computer Based

- 4.2.1 NMED Report – If applicable

Attachment 1 Radiological Incident Response Impoundment Guidelines

Management will consider the following questions before approving a request to impound radioactive materials:

Regulatory Control:

- Are the radioactive materials under the direct control and responsibility of a licensee or registrant?
- Are the materials in a controlled location?
- Are the materials directly and negatively impacting public health and safety?
- Is there a possible public perception problem with the current location?

Physical/chemical form:

- What is the isotope and physical/chemical form of the material?
- Are other hazardous or explosive materials involved?
- What is activity of the material?

Physical condition:

- Are the materials intact, crushed, leaking or damaged in some way?
- Are the materials concentrated or dispersed over a large area?
- Are the materials separate or part of a larger device?

Amount: What is the volume of the material?

Transportation: Can the materials be transported safely?

Waste management:

Does managing the materials involve simple storage or is any processing involved in disposing of the materials?

Alternatives:

- Are there any safe and reasonable alternatives to the state impounding the material?
- Is there a temporary storage location and responsible party available?

Attachment 2
Minimum Basic Event Information for a Complete Report

| | |
|---|--|
| 1. Essential Details (Provide) | 2. Source/Radioactive Material/Devices |
| a. State Event Report Identification No. | a. Isotope and activity; manufacturer, model and serial number, leak test results, if applicable. |
| b. Licensee name and location, including licensing State. | b. For events involving lost, stolen or abandoned material does source exceed IAEA Category 2 quantity? Provide monthly event update through closure of event. |
| c. License No. or identify as General Licensee, (if applicable). | c. For equipment/device involved indicate the make, model and serial no. and provide clear description of any equipment problems. |
| d. Event date, time of occurrence and location (site) of event. | 3. Release of Licensed Material or Contamination |
| e. Event circumstances and details including source radionuclide and activity. | a. Release type (air or water); contamination (person or surface); isotope and activity released |
| f. Date State Agency was notified of event by licensee or non-licensee. | 4. Medical Event |
| g. Notifications: local police, FBI, and other States; as needed. | a. Procedure administered; dose intended and dose administered; isotope and activity administered; target organ |
| h. Whether the event is NRC reportable and the applicable State reporting requirement. | b. Patient and Referring Physician notified? |
| i. Persons involved. Note: include position title(s) but do not submit personal or privacy information. | 5. Overexposure |
| j. Licensee corrective actions and what actions were performed to prevent recurrence? | a. Indicate short and long-term health effects and exposure type (e.g., whole body or extremity) |
| k. Possible generic safety concerns | b. Is event a potential Abnormal Occurrence? |
| l. Root cause(s) and contributing factors | 6. Transportation |
| m. Actions the State took? Onsite inspections, any enforcement actions? | Type of transport; identity of shipper; package type and ID number (if available) |

Source: STP Procedure SA-300, Appendix; Handbook on Nuclear Event Reporting in the Agreement States, 3/2006.

Attachment 3

| Event Reporting Schedule for Agreement States | | |
|--|---|---|
| REPORTABLE EVENT NOTIFICATION¹ | AGREEMENT STATE REPORTING SCHEDULE TO NRC | REPORTING METHODS TO NRC⁴ |
| 4 HOURS | Significant reportable events requiring 4 hours or less² notification by Agreement State licensees. | Report initial information to the NRC Operations Center⁵ (301) 816-5100 or (301) 951-0550 FAX #: (301) 816-5151 |
| 24 HOURS | Significant reportable events requiring 24 hours or less notification by Agreement State licensees. | |
| | Events involving theft or terrorist activities should be reported to the FBI³ . | |
| 30 – 60 DAYS | 30 – 60 day reportable events requiring greater than 24 hour notification by Agreement State licensee and event follow-up reports. | Email: NMED@INL.GOV Telephone: 208-526-6904 or 208-526-0990-fax Disk/CD: INL, P.O. Box 1625, Idaho Falls, ID 83415 Attn: Thomas W. Smith or Written: Director of STP US NRC, Washington, DC 20555 |
| VOLUNTARY | Lost, stolen, or abandoned sources reported to the Agreement State that are non-AEA or unlicensed material and not covered by the above two categories. | Email: NMED@INL.GOV |

Rev. 3, December 2005

Source: STP Procedure SA-300, Appendix; Handbook on Nuclear Event Reporting in the Agreement States, 3/2006.

1 Personal or sensitive information should not be included in event descriptions (e.g., names, personal addresses, or-- social security-- numbers).

2 Events involving lost, actual or attempted theft, sabotage, or diversion of radioactive materials or devices containing "high-risk" sources in quantities greater than or equal to the quantities of concern (i.e., quantities greater than or equal to Category 2 sources listed in the International Atomic Energy Agency 's Code of Conduct and as outlined in reporting requirements in 10 CFR Part 20.2201

3 A revision to the U.S. Code assigns lead responsibility for material events involving possible theft or terrorist activities to the Federal Bureau of Investigation (FBI).

4 A sample fax to the NRC Operations Center is available in Table 1 of STP procedure SA-300.

5 The NRC Operations Center staff will promptly notify the appropriate Region Duty Officer (RDO) and Headquarters staff of Agreement State events. Therefore, no separate notification to other NRC staff by an Agreement State is necessary.

6 An example of the minimum basic event information required for a complete record is provided in Section 3 of SA-300.

7 Voluntary reporting is a joint national effort of the NRC and the Conference of Radiation Control Program Directors (CRCPD) to track all types of non-AEA, unlicensed or non-reportable AEA lost and found radioactive material. More information about the national program may be found in SA-300.

Pennsylvania Department of Environmental Protection Bureau of Radiation Protection

BRP-RM-03 THE NUCLEAR MATERIALS EVENT DATABASE

Revision 1, September 26, 2006
INTERNAL USE ONLY



Scott Wilson _____ *Date:* _____
Originator

Eastern Area: _____ *Date:* _____

Central Area: _____ *Date:* _____

Western Area: _____ *Date:* _____

*Radiation Control
Division Chief:* _____ *Date:* _____

1.0 SCOPE / APPLICABILITY

- 1.1 This procedure provides guidance for entering reports in the Nuclear Materials Event Database (NMED), documenting material events and response actions, and submitting reports to the Nuclear Regulatory Commission (NRC) via the Idaho National Laboratory (INL).
- 1.2 Emergency actions, event response, and follow up actions (such as corrective actions and immediate notifications) are not within the scope of this procedure. See BRP-ER-5.03 and BRP-ER-6.10 for response guidance.

For NRC notification requirements, see Attachment 2 of this procedure, and STP Procedure SA-300 (STP Procedures may be obtained from the internet at: <http://www.hsr.d.ornl.gov/nrc/procfm.htm>).

2.0 INTRODUCTION

- 2.1 The NMED system was established for the collection, control, and review of material events that are reported to the NRC by the states. The database was originally intended to document material events in the scope of the Atomic Energy Act (AEA): byproduct, source, and special nuclear materials. NMED is also one method of evaluation of Agreement State Radiological Programs by the NRC IMPEP Team.
- 2.2 The materials event reporting system actually involves two databases, one is maintained on the Nuclear Regulatory Commission (NRC) website and the other is a maintained locally. Entries are made into the local database and subsequently transmitted to the NRC contractor, INL, where they undergo review prior to inclusion to the NMED.
- 2.3 The NRC and Agreement States use NMED to track events and event trends. The NRC performs quarterly and yearly evaluation of the NMED records, and prepares quarterly and annual reports. These reports are available from the NMED website.
- 2.4 The NMED database can be queried to evaluate trends, as well as to obtain details about events involving radioactive materials.
- 2.5 The Council of Radiation Control Program Directors (CRCPD) petitioned the NRC to include Non-AEA materials in the national database. The CRCPD encourages the use of NMED to track lost, stolen, discovered/found and abandoned radiation sources.
- 2.6 BRP will use NMED to track events involving lost, stolen, abandoned or found radioactive material under specific or general license or order authorized by any Federal, State or other government agency. At the discretion of BRP, the local database will be used to document and track closure of Commonwealth radiation events that may not be required to be reported to NRC by SA-300.

3.0 PERSONNEL RESPONSIBILITIES

3.1 Regional Radiation Protection Program Manager or RP Program staff

3.1.1 Responsibilities

- a. Provide timely information on events to the Bureau Director and Radiation Control Division Chief. Information that is required to complete a data entry is shown in Attachment 1.
- b. Perform searches of the national NMED database as necessary.

3.2 Radiation Control Division

3.2.1 Responsibilities

- a. Provide for review of NRC quarterly trending reports and dissemination of information as appropriate.
- b. Provide for report input to the local database using the reporting thresholds in SA-300.
- c. Provide for periodic data submissions by e-mailing NMED entries to the NRC via INL.
- d. Assist staff in searches of the national NMED database as required.
- e. Maintain the local database and provide unique identification numbers for reports received.
- f. Ensure records submitted are complete and closed by the state in NMED.

4.0 NMED DATABASE ENTRIES

4.1 DATABASE ENTRIES

- 4.1.1 Data entry requires access to the NRC provided software.
- 4.1.2 Open the database; this will open the main menu.
- 4.1.3 On the main menu, open "create and edit records," this will open the "master event list."
- 4.1.4 Note the most recent (last) event record number.
- 4.1.5 On the master event list, select "add record".
- 4.1.6 Enter the next sequential event number in the format of state abbreviation "PA," dash, last two digits of the year, event number. Example: PA-060010 is the event number for the tenth event recorded for the Commonwealth in the year 2006.
- 4.1.7 Populate the remaining information fields, e.g. licensee / registrant name, address, telephone number(s), device names, etc. to describe the event. Use pick-lists (drop down menus) when possible to standardize information and simplify future keyword searches.
- 4.1.8 Select "next" to go to the "narrative" page.
- 4.1.9 Enter a narrative description of the event using the information submitted on Attachment 1 of this procedure or equivalent. The narrative can be viewed from the outside and should not contain sensitive, confidential or proprietary information.
- 4.1.10 Select "next" and enter any applicable references.

- 4.1.11 Select "Next" after each entry to save the changes.
- 4.1.12 Select "Master Event List" when all entries are complete.
Note: this record is only saved on the local database. Forwarding the event record to the NRC is necessary to complete an event record in the national database.
- 4.1.13 If the event report is to be submitted to the national NMED database, then forward the report per section 4.3 in accordance with SA-300 frequency.

4.2 UPDATING OR MODIFYING A REPORT

- 4.2.1 Data entry requires access to the NRC provided software.
- 4.2.2 Open the database; this will open the main menu.
- 4.2.3 On the main menu, select "create and edit records," this will open the "master event list."
- 4.2.4 Select the report to edit or update then select the Edit button.
- 4.2.5 If the report is to be updated on the national database, ensure the "Send this report to NRC" field displays "YES."
- 4.2.6 Edit report fields as necessary, choosing NEXT after each entry.
- 4.2.7 If the event report is to be submitted to the national NMED database, then forward the report per section 4.3 in accordance with SA-300 frequency.

4.3 FORWARDING INFORMATION TO THE NATIONAL DATABASE

- 4.3.1 Open the database; this will open the main menu.
- 4.3.2 While on the main menu, open "create a file of records to send to the NRC".
- 4.3.3 The screen will change to the "create transfer file"
- 4.3.4 Fill in dates that include the file dates for transfer. The default start date is the date of the last file transfer. Select the "create transfer file" button.
- 4.3.5 Select "E-mail to INL".
- 4.3.6 Follow instructions provided.

4.4 SEARCHING THE NATIONAL DATABASE

- 4.4.1 Access the NMED website, <https://nmed.inl.gov/>
- 4.4.2 Enter your User ID and Password
- 4.4.3 Select "search the NMED"
- 4.4.4 Select search criteria and follow instructions provided.

4.5 SEARCHING THE LOCAL DATABASE

- 4.5.1 The local database is maintained on a network drive.
Local database searches should be performed by the responsible individual.

END OF PROCEDURE

Attachment 1 Minimum Basic Event Information for a Complete Report

1. Essential Details

- a. State Event Report Identification No. _____
- b. Licensee name and location, including licensing State. _____
- c. License / Registration # or identify as General Licensee (if applicable). _____
- d. Event date, time of occurrence and location (site) of event.

- e. Event circumstances and details including source radionuclide and activity.

- f. Date State Agency was notified of event by licensee or non-licensee. _____
- g. Notifications: police, FBI, other States; as needed. _____
- h. NRC reportable? Applicable State reporting requirement. _____
- i. Position title(s) of persons involved _____
- j. Licensee corrective actions. _____
- k. Possible generic safety concerns. _____
- l. Root cause(s) and contributing factors. _____
- m. Actions taken by the State. Onsite inspections; enforcement actions.

2. Source/Radioactive Material/Devices

- a. Isotope and activity; manufacturer, model and serial number, leak test results, if applicable. _____
- b. For events involving lost, stolen or abandoned material does source exceed IAEA Category 2 quantity?

- c. For equipment/device involved make, model and serial no., provide clear description of any equipment problems. _____

3. Release of Licensed Material or Contamination

- a. Release type (air or water); contamination (person or surface); isotope and activity released _____

4. Medical Event

- a. Procedure administered; dose intended and dose administered; isotope and activity administered; target organ

- b. Patient and Referring Physician notified? _____

5. Overexposure

- a. Indicate short and long-term health effects and exposure type (e.g., whole body or extremity)

- b. Is event a potential Abnormal Occurrence? (see SA-300) _____

6. Transportation

- a. Type of transport; identity of shipper; package type and ID number (if available) _____

**NOTE: Provide monthly updates until event is closed and actions are complete.
Reference the State Event Report ID number in future updates and correspondence.**

Source: STP Procedure SA-300, Reporting Material Events, Appendix; Handbook on Nuclear event Reporting in the Agreement States, March 2006.

Attachment 2

| Event Reporting Schedule for Agreement States | | |
|---|---|---|
| REPORTABLE EVENT NOTIFICATION ¹ | AGREEMENT STATE REPORTING SCHEDULE TO NRC | REPORTING METHODS TO NRC ⁴ |
| 4 HOURS | Significant reportable events requiring 4 hours or less ² notification by Agreement State licensees. | Agreement States should report to NRC within 4 hours of notification by an Agreement State licensee. |
| 24 HOURS | Significant reportable events requiring 24 hours or less notification by Agreement State licensees. | Agreement States should report to NRC within 24 hours of notification by an Agreement State licensee. |
| | Events involving theft or terrorist activities should be reported to the FBI . ³ | Agreement and non-Agreement States should report to the FBI within 24 hours of notification. |
| 30 – 60 DAYS | 30 – 60 day reportable events requiring greater than 24 hour notification by Agreement State licensee and event follow-up reports. | Agreement State should provide 30-60 day notification and any follow-up reports to NRC-NMED on a monthly basis. NOTE: Licensee reports received within less than 30 days of the date of the monthly report may be included in the next month's report. ⁶ |
| VOLUNTARY | Lost, stolen, or abandoned sources reported to the Agreement State that are non-AEA or unlicensed material and not covered by the above two categories. | Voluntary reporting by the Agreement States and non-Agreement States. ⁷ |

Rev. 3, December 2005

Source: STP Procedure SA-300, Appendix; Handbook on Nuclear Event Reporting in the Agreement States, 3/2006

1) Personal or sensitive information should not be included in event descriptions (e.g., names, personal addresses, or-- social security-- numbers).

2) Events involving lost, actual or attempted theft, sabotage, or diversion of radioactive materials or devices containing "high-risk" sources in quantities greater than or equal to the *quantities of concern* (i.e., quantities greater than or equal to Category 2 sources listed in the International Atomic Energy Agency's Code of Conduct and as outlined in reporting requirements in 10 CFR Part 20.2201

3) A revision to the U.S. Code assigns lead responsibility for material events involving possible theft or terrorist activities to the Federal Bureau of Investigation (FBI).

4) A sample fax to the NRC Operations Center is available in Table 1 of STP procedure SA-300.

5) The NRC Operations Center staff will promptly notify the appropriate Region Duty Officer (RDO) and Headquarters staff of Agreement State events. Therefore, no separate notification to other NRC staff by an Agreement State is necessary.

6) An example of the minimum basic event information required for a complete record is provided in Section 3 of SA-300.

7) Voluntary reporting is a joint national effort of the NRC and the Conference of Radiation Control Program Directors (CRCPD) to track all types of non-AEA, unlicensed or non-reportable AEA lost and found radioactive material. More information about the national program may be found in SA-300.

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF RADIATION PROTECTION
DIVISION OF RADIATION CONTROL**

DOCUMENT NUMBER: 291-0400-001

TITLE: Policy & Procedure Summary, Radiation Control Division

EFFECTIVE DATE: Revised: September 20, 1996

AUTHORITY: This policy is established under the authority of the Radiation Protection Act, act of July 10, 1984, P.L. 688, No 147 (35 P.S. §§ 7110.101-7110.703).

POLICY: This is an assembly of policies that were intended to eliminate difficulties of interpretation that have arisen during inspections when field staff have tried to enforce the regulations.

PURPOSE: These policy documents that are intended to help the Division of Radiation Control field staff apply the regulations uniformly throughout the state.

APPLICABILITY: These policies are for all Division of Radiation Control field inspectors.

DISCLAIMER: The policies and procedures outlined in this guidance are intended to supplement existing regulations.. Nothing in the policies or procedures shall affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP to give the rules in these policies that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

PAGE LENGTH: 10

LOCATION: Vol. 3, Tab 01

BUREAU OF RADIATION PROTECTION
DIVISION OF RADIATION CONTROL
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POLICY INSTRUCTIONS
TO STAFF

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EXEMPTION FOR CYTOGEN REAGENT KIT
(Memo Dated April 28, 1993)
EXEMPTION FOR MEDICAL USE OF RADIOACTIVE MATERIAL
FDA-LICENSED DIAGNOSTIC IMAGING KIT
SATUMOMAB PENDETIDE TAGGED WITH INDIUM 111 CHLORIDE

BACKGROUND

On December 29, 1992, the Food and Drug Administration (FDA), U.S. Department of Health and Human Services, issued License No. 1164 to Cytogen Corporation (Princeton, NJ) to manufacture and ship for sale, barter, or exchange in interstate or foreign commerce a new diagnostic imaging agent, satumomab pendetide (OncoScint® CR/OV, Product License Application No. 89-0601). OncoScint® is licensed for use in patients with ovarian or colorectal cancer and is tagged with Indium 111 Chloride (INDICLOR™, New Drug Application (NDA) No. 19-862) prior to injection.

At issue, is the regulatory status of an FDA Product License Application (PLA) under Pennsylvania's Medical Use of Radioactive Material Regulations set forth in 25 Pa. Code Chapter 224. Section 224.60 (2) of the regulations provides that a licensee may use for medical use only:

(2) Reagent kits that have been manufactured, labeled, packaged and distributed in accordance with an approval by the Department of Environmental Protection (Department) under Sec. 217.91, an agreement state or the NRC, under equivalent regulations for the preparation of radiopharmaceuticals for medical use.

FDA regulations set forth in 21 CFR Subchapter F, Part 600 pertaining to radioactive biological products are deemed to be equivalent to Department standards for the preparation of radiopharmaceuticals for medical use.

Under Sec. 224.201 (a) of the regulations,

(a) "A licensee may use radioactive material in a diagnostic radiopharmaceutical or a generator or reagent kit for preparation and diagnostic use of a radiopharmaceutical containing radioactive material for which the FDA has accepted a "Notice of Claimed Investigational Exemption for a New Drug" or approved a "New Drug Application".

While Sec. 224.201 is silent as to the use of reagent kits for which the FDA has approved a PLA, the product license for OncoScint® CR/OV is issued by the FDA in accordance with applicable provisions of Title III Part F of the Public Health Service Act of July 1, 1944 (58 Stat. 702) and regulations promulgated thereunder. These Federal standards adequately protect the public health and safety.

Section 224.9 of the Medical Use of Radioactive Material Regulations authorizes the Department to grant exemptions from its Radiological Health Regulations upon a determination that the exemption does not endanger life or property or the common defense and security and is otherwise in the public interest.

EXEMPTION

The Cytogen Corporation's diagnostic imaging kit OncoScint® CR/OV (satumomab pendetide), PLA No. 89-0601 is hereby exempt from the requirements of 25 Pa. Code Sec. 224.201 (a) so long as the manufacturer complies with applicable provisions of Federal law.

INQUIRES

Inquiries regarding the exemption of the Cytogen Corporation's reagent kit, OncoScint® CR/OV (satumomab pendetide) should be directed to Stuart R. Levin, Chief, Radioactive Material Licensing, Department of Environmental Protection, P.O. Box 8469, Harrisburg, PA 17105-8469. Mr. Levin's telephone number is (717)-787-3720.

NEW REGULATIONS
D.E.P. GUIDANCE
REGARDING
RADIOACTIVE CONTAMINATION SURVEYS
(Memo Dated OCTOBER 1, 1992)

This regulatory guidance is public information and should be distributed to any person who has questions.

Section 224.108 (e): "A licensee shall survey for removable contamination each day of use the areas where radiopharmaceuticals are routinely prepared for use or administered and each week where radioactive materials are stored."

GUIDANCE

PA licensee's will be considered in compliance with 224.108 (e) if they are (1), complying with 224.108 (a); and (2), if or when radiation levels exceed the licensee's trigger levels, wipes were taken to determine if the levels were due to contamination..

If the PA licensee has an NRC license, the same criteria as above will apply.

FIXED C-ARM FLUOROSCOPIC INSTALLATIONS
(Memo Dated FEBRUARY 28, 1991)

In determining compliance with Sections 221.33 (a) and (b) at fixed C-Arm fluoroscopic installations, entrance exposure rate measurements should be made as follows:

- a. Since the SID (Source-to-Image receptor-Distance) in fixed C-Arm installations is variable, position the source housing and/or the imaging assembly so as to obtain the minimum SID.
- b. Measure the exposure rate at 30 cm from the input surface of the imaging assembly under the conditions specified in Section 221.33 (c) (5).

INTERPRETATIONS OF CHAPTER 217, LICENSING
(Memo Dated JANUARY 30, 1990)

There has been a question about the interpretation of the above mentioned section as to whether or not calibration or reference sources which have decayed to less than their exempt quantity have to be listed in the quarterly inventory.

The answer is YES.

The Department requires all calibration or reference sources obtained under section 217.63 (d) (4) to be inventoried quarterly until their legal disposition. This means Cobalt-57 sources must be inventoried when they decay below 100 microcuries.

The NRC may interpret this requirement differently. Therefore, it is possible that a licensee may not be listing any sources below an exempt quantity (byproduct or NARM) on their inventory.

ENFORCEMENT

1. DO NOT CITE a licensee for failure to inventory calibration sources which have decayed to exempt quantities.
2. DO include a paragraph in the inspection letter advising the licensee to include those sources in their inventory and that compliance with section 217.63 (e) (4) (ii) will be checked during the next inspection.

NEW EMERGENCY ROOMS
(Memo Dated NOVEMBER 20, 1989)

The design of emergency rooms is changing as older rooms are being remodeled. The overhead stationary tube is more convenient than a portable and capable of better radiographs. One tube for several rooms is also cost effective. The design will increase the efficiency of the emergency room when x-rays are needed.

On the negative side, the convenience will probably lead to more x-rays being taken in the emergency room which is shielded for x-rays on only three sides. The side toward the hall cannot be shielded since no door will be put on this end. In addition, the opening into this room will be 6 to 8 feet wide, making the door impractical. This leaves only administrative controls to protect the people in the hallway.

The following guidelines are suggested for your review.

GUIDELINES FOR USING STATIONARY X-RAY UNITS IN NEW EMERGENCY ROOMS

1. The x-ray technologist must clear the hall in front of the room prior to making an exposure.
2. A portable lead shield shall be available and placed in the room which is being used for the x-ray exposure. It will be placed to eliminate, as much as possible, any scatter radiation into the hall.
3. Projections which require the tube to be pointed toward the open doorway are not permitted.
4. The x-ray tube shall not be operable from a control panel where the operator cannot view the patient and the control panel at the same time.

INDUSTRIAL RADIOGRAPHY REGULATIONS
(Memo Dated AUGUST 4, 1989)

The following interpretations of Chapter 225 apply to shielded room radiography employing only x-ray equipment.

1. Section 225.22 (a): Recommend that interlocks and other safety devices be tested periodically (similar to requirement in Section 225.21 (d) for cabinet systems). Interlocks that de-energize the x-ray unit in lieu providing an audible signal are acceptable.
2. Section 225.22 (b): Compliance with this section satisfies the training requirements; do not enforce Section 225.41.
3. Section 225.22 (c): Compliance with this section satisfies the personnel monitoring requirements; do not enforce Section 225.43
4. Section 225.31 (d): Do not enforce this section as the purpose of the survey meter is to comply with Section 225.22 (d). In lieu of calibration, however, there must be a way of determining that the meter is operable.

WRITTEN SAFETY PROCEDURES FOR X-RAY OPERATORS
(Memo Dated MAY 2, 1989)

Enclosed are common safety procedures which may be given to registrants during an inspection as an example of what is needed to comply with Section 221.11 (d) of the regulations. The registrant should be told that the procedures may be used as is or may be modified, if necessary, to meet their particular situation.

The item of non-compliance should be worded as follows:

“Written safety procedures were not available to the operators of the x-ray equipment, Chapter 221.11 (d). If the procedures given to you at the time of the inspection or a modified version of these procedures are made available in the future, no further action is required.”

This requirement should be enforced only at facilities having operators in addition to the practitioner. If this is the only item of non-compliance, the compliance status field in LUMIS should be “2”.

SAFETY PROCEDURES
X-RAY EQUIPMENT

1. Only qualified individuals, authorized by the registrant, may operate the x-ray equipment.
2. X-ray examinations must be prescribed by a licensed practitioner.
3. Technique factors must be posted and used for each projection to be performed.
4. No individual occupationally exposed to radiation may hold patients during exposures except in an emergency. If a patient must be held by an individual, that individual must be protected with adequate shielding devices (e.g., a lead apron and gloves) and be positioned so that no part of that individual's body, except for the hands and forearms, may be struck by any part of the useful beam.
5. Only individuals required for the radiographic procedures are to be in the radiographic room during exposures. All such individuals, except for the patient, are to use appropriate protective devices.
6. The useful beam must be confined to the area of clinical interest.
7. Ask female patients (of child-bearing age) about the possibility they may be pregnant. Do not assume they are not.
8. Questions concerning radiation protection should be directed to the registrant of the individual designated as the radiation safety officer for the facility. Inquiries may also be made to the Pennsylvania Bureau of Radiation Protection. The telephone number is (717)-787-3720.

RECIPROCITY FOR RADIOACTIVE MATERIAL
(Memo Dated APRIL 12, 1988)

The use of byproduct, source, and special nuclear material in Pennsylvania is completely under the jurisdiction of the Nuclear Regulatory Commission (NRC) 215.1 (d).

Persons who conduct radioactive material operations in Pennsylvania on temporary jobs and who use only byproduct, source, and/or special nuclear material under an NRC or Agreement State License are exempt from 217.121. These licensees are not required to notify us, nor do they operate under our radiation regulations.

Persons in the above paragraph operate under the requirements of 10 CFR 150.20 (b) (1). This section also mentions use of NRC Form 241, "Report of Proposed Activities in Non-Agreement States."

Section 217.122 (reciprocity of licenses of NARM) does apply to persons operating in Pennsylvania on temporary jobs and holding an Agreement State of licensing state license. If these persons have both types of material, 217.122 still applies to the use of NARM.

SUMMARY

1. Out-of-state licensees using byproduct, source, and special nuclear material must comply with 10 CFR 170. They have no legal obligations to Pennsylvania.
2. Out-of-state licensees using NARM alone must comply with 217.122.
3. Out-of-state licensees using both NARM and "NRC" material must comply with 217.122 and 10 CFR 170.



Fact Sheet

Commonwealth of Pennsylvania • Department of Environmental Protection

MEDICAL REPORTABLE EVENTS AND OTHER MEDICAL REPORTS FOR RADIATION-PRODUCING MACHINES (Medical Accelerators and X-Ray Machines)

The Pennsylvania Code requires that a licensee or registrant possessing a radiation-producing machine report to the Department of Environmental Protection, Bureau of Radiation Protection, all medical reportable events that occur during therapeutic use of their radiation-producing machine. Other medical reports are also required when exposure to therapeutic or diagnostic use of a radiation-producing machine results in, or is the suspected cause of, an injury that was not an expected consequence when the procedure was started. Injury is considered any condition that warrants medical intervention. The Code requires these notifications to be performed within specified time frames. This Fact Sheet has been developed to assist with the notification process. It includes the addresses and phone numbers of the regional offices requiring notification. It also includes responsibilities (see opposite page) for the licensee of therapy machines or the registrant of diagnostic machines to record important dates in order to be compliant with the time frame required by the regulations (25 Pa. Code, Sections 219.228 and 219.229).

The medical reportable event (MRE), formerly known as "misadministration," requires telephone notification as well as written reports.

For more information, visit DEP's website at www.dep.state.pa.us, Keyword: "DEP Radiation Protection."

The appropriate regional office and central office telephone numbers and addresses have been listed for your use.

Southeast Regional Office:

Bureau of Radiation Protection
2 East Main Street
Norristown, PA 19401
Phone: 484-250-5950
Fax: 484-250-5951

Southcentral Regional Office:

Department of Environmental Protection
Bureau of Radiation Protection
909 Elmerton Avenue
Harrisburg, PA 17110-8200
Phone: 717-705-4700
Fax: 717-705-4890

Southwest Regional Office:

Department of Environmental Protection
Bureau of Radiation Protection
400 Waterfront Drive
Pittsburgh, PA 15222-4745
Phone: 412-442-4000
Fax: 412-442-5246

If you require any further guidance concerning programmatic questions, please call the Central Office:

Department of Environmental Protection
Bureau of Radiation Protection
P.O. Box 8469
Harrisburg, PA 17105-8469
Phone: 717-787-3720
Fax: 717-783-8965

Medical reportable event for radiation-producing machine therapy (§219.3) - The administration to a human being, except for an administration resulting from a direct intervention of a patient that could not have been reasonably prevented by the licensee or registrant, that results in one of the following:

- (i) An administration of a therapeutic radiation dose to the wrong individual.
- (ii) An administration of a dose for therapy when the result is an increase in the total expected doses inside or outside of the intended treatment volume for organs, tissue or skin that exceeds 20% of the total prescribed dose for the intended target volume.
- (iii) A total dose delivered to the treatment site identified in a written directive for therapy that is outside the prescribed dose range or differs from the total prescribed dose by more than 20%, or for a fractionated dose, when the weekly administered dose differs from the weekly prescribed dose by more than 30%.

Licensee Responsibilities for Therapy Machines

Pa. Code Title 25, Section 219.228

- Notify the Department by telephone within 24 hours after discovery of the event. 219.228(a)(1)

Date and Time of Discovery of Event: _____

Date and Time of Notification: _____

- Submit a written report to the Department within 15 days after discovery of the event. 219.228(a)(2)

Date of Report: _____

- Notify the referring physician within 24 hours after discovery of the event. 219.228(a)(3)

Date and Time of Notification: _____

- Notify the patient within 24 hours after discovery of the event (provided there is concurrence by the referring physician). 219.228(a)(3)

Date and Time of Notification: _____

- If the patient was notified, a written report to the patient must be submitted within 15 days. 219.228(a)(4)

Date of Report to Patient: _____

Registrant Responsibilities for Diagnostic Machines

Pa. Code Title 25, Section 219.229

- Submit a written report to the Department within 30 days after determination of damage or injury to a patient exposed to radiation. 219.229

Date of Report: _____

The body removes tritium naturally in the same way it removes water - by excreting it in the urine. As with all ionizing radiation, in theory, we assume exposure to tritium could increase the risk of developing cancer.

Tritium in Landfills

Tritium has also been identified in landfill leachate throughout the United States and abroad. Recent studies performed by the Department of Environmental Protection's (DEP) Bureau of Radiation Protection, in cooperation with the Bureau of Waste Management (BWM), revealed tritium in landfill liquid effluents, known as leachate.

BRP suspects the cause of tritium in landfill leachate is from discarded self-luminous exit signs that have been disposed in landfills improperly. Crushed signs release the tritium gas and form tritiated water. Treated leachate concentrations, once released to the environment, are dispersed and diluted to levels acceptable under national drinking water standards. It is important to note that 20,000 picocuries per liter (pCi/L) is the Environmental Protection Agency (EPA) established maximum contaminant level for tritium in community water systems (40 CFR 141.16).

What is DEP doing about it?

Since 2003, landfills in the Commonwealth have been required to monitor all incoming waste for radioactivity. Unfortunately, it is very difficult to detect tritium by remote monitoring of waste trucks; therefore, these devices are not always identified prior to burial. DEP has contacted the NRC and the EPA concerning this issue and requested additional regulatory control requirements to ensure the safe and proper disposal of these sources in the future. DEP will continue to monitor and investigate any potential environmental tritium contamination. In addition, DEP is performing outreach to the public, owners of these devices, and landfills in an effort to educate and reduce the likelihood of these signs being improperly disposed of. This Fact Sheet is part of the educational effort.

Ownership and Disposal Responsibilities

If you own exit signs containing tritium, it is your legal responsibility to ensure the proper disposal or recycling of these products. It is illegal to abandon or dispose of self-luminous signs, except by transfer to companies licensed by the NRC or by a state authorized to administer its own comparable program (an Agreement State). Manufacturers of the devices have radioactive materials licenses, which allows them to accept the return of the devices. The devices cannot be discarded in municipal or industrial trash, nor disposed as a hazardous waste. Improper disposal can result in tritium releases to the environment or accidental human exposure. DEP has created a fact sheet especially for owners of these devices, entitled "Tritium Exit Sign Owner Responsibilities," 2910-FS-DEP4061, 4/2006.

In addition to ensuring proper handling and disposal, owners should consider alternative technologies when replacing these devices. The Product Stewardship Institute (PSI) was awarded an EPA grant to identify and implement product stewardship solutions for devices containing radioactive materials, and these solutions may be helpful in making replacement decisions. The PSI website contains contact information for businesses that are licensed to receive used tritium exit signs. For additional information, contact the Bureau of Radiation Protection at 717-787-2480, or visit the PSI Web site at www.productstewardship.us.

For more information regarding your responsibilities concerning these or other radioactive materials, contact your regional Bureau of Radiation Protection office, the Bureau's Central Office in Harrisburg, or visit our Web site at www.depweb.state.pa.us, Keyword: "Radiation."



Fact Sheet

Commonwealth of Pennsylvania • Department of Environmental Protection

Tritium Exit Sign Owner Responsibilities

The Bureau of Radiation Protection (BRP) has prepared this fact sheet to inform the owners of tritium exit signs of the proper disposal methods, and the hazards associated with these devices.

What is tritium?

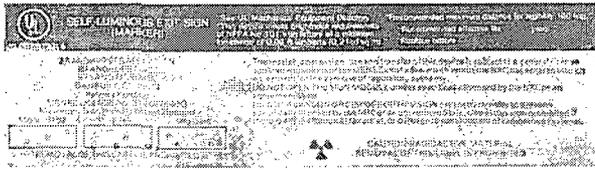
Tritium is a radioactive isotope of the element hydrogen.

What are tritium exit signs and how can I identify them?

Tritium exit signs are signs that display the word "exit" to identify the exit route of a building or enclosed space. They are typically used in buildings to illuminate egress routes in areas where access to electrical service is unreliable, unavailable or costly. Tritium exit signs are self-luminous and require no electrical source.



This type of exit sign can be distinguished from others by observation. The signs illuminate with a greenish glow emanating from several sealed glass tubes arranged into the word "exit." Another indication that the sign may be a tritium exit sign is the lack of evidence of an electrical power source. The sign may also be identified by the required labeling, similar to those shown below, which includes the three bladed radiation symbol (as shown below), and the words "Caution - Radioactive Material," as well as other information about the quantity of radioactive tritium and the manufacturer.



(Example of a tritium exit sign label)

Regulation of Tritium EXIT Signs

Tritium exit signs are regulated by the Nuclear Regulatory Commission (NRC) under federal regulations (10 CFR 32.51 and 31.5) or by a state authorized to administer its own comparable program (an Agreement State). Under the NRC regulations, a user has a general license to own the device. There are more than 60,000 tritium exit signs in use in the Commonwealth of Pennsylvania, according to estimates derived from the NRC.

What's the problem?

Recent testing performed by the Pennsylvania Department of Environmental Protection (DEP) has identified tritium contamination in many of the landfills throughout the Commonwealth. DEP believes that illegal disposal of tritium signs is the cause. Often, building maintenance personnel or construction/demolition workers may be unaware that the devices contain radioactive material. As a result, these devices may end up in landfills, incinerators and at scrap metal recycling facilities.

What can I do?

As an owner of these devices, it is important to know that tritium exit signs must be disposed of or recycled properly. To that end, the following management practices should be considered:

Ensure that building maintenance staff and employees are aware of the need to use caution when working on or removing tritium signs.

- Ensure that when tritium signs are to be removed or replaced, they are returned to the manufacturer or a low-level radioactive waste site for disposal.
- Ensure that employees are aware that tritium signs are not to be disposed of in the ordinary trash.
- Ensure that all staff is aware that a broken tritium exit sign has the potential to result in contamination and potential radiation dose to people, property and the environment.
- Ensure that all staff is aware of the special handling and disposal requirements for these devices.

In addition to ensuring proper handling and disposal, owners should consider alternative technologies when replacing these devices. The Product Stewardship Institute (PSI) was awarded an Environmental Protection Agency (EPA) grant to identify and implement product stewardship solutions for devices containing radioactive materials and may be helpful in making replacement decisions. The PSI Web site contains contact information for businesses that are licensed to receive and handle used tritium exit signs. For additional information, contact the Bureau of

Radiation Protection at 717-787-2480, or visit the PSI Web site at www.productstewardship.us.

How do I ensure safe and legal disposal?

Contact the sign manufacturer for instructions and return cost information. If the manufacturer is unable to accept return of the device, other manufacturers of similar devices, provided they are licensed to accept tritium, may accept the signs. Alternately, you may consider use of a radioactive waste broker or processor to perform packaging, transport and disposal of unwanted tritium signs.

Where can I find additional information?

For a list of radioactive waste brokers and processors, contact DEP's Bureau of Radiation Protection (717-787-2480).

For more information regarding your responsibilities concerning these or other radioactive materials, contact your regional Bureau of Radiation Protection or visit our Web site at www.depweb.state.pa.us. Keyword: "Radiation."



If you find a radioactive source - BEWARE!



What you should do...



RECOGNIZE THE RADIATION SYMBOL



DO NOT TOUCH THE SOURCE!

**KEEP YOUR DISTANCE!
(10 TO 20 FEET)**



Step away from the source. 20 feet or more is preferable. If possible, stand behind a wall or some other substantial structure; this will reduce your exposure.



WARN OTHERS – SECURE THE AREA.



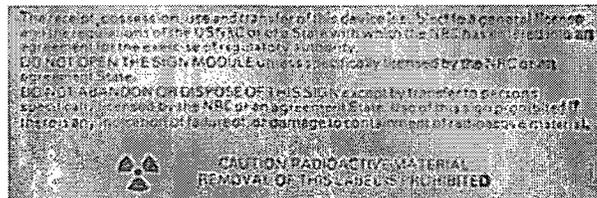
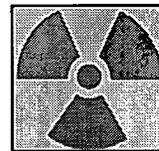
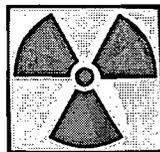
**CONTACT the
PA Bureau of Radiation Protection
717-787-2480**

Background Information

Each year a number of radioactive items are lost, stolen, or abandoned. Some of these items are recovered by scrap yards, recyclers, and landfill personnel or the public. Please familiarize yourself with the information contained in this poster to better prepare yourself in case you should find radioactive material.

RADIATION WARNING SYMBOL

This symbol should appear on containers and devices that are radioactive. The symbol may be colored differently or etched or stamped on items and is sometimes accompanied by words of warning. Not all containers or devices that are radioactive will be marked with the symbol.

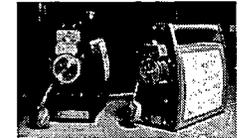


Tritium EXIT sign label

Examples of items that are radioactive...



Metal drums



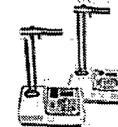
Industrial radiography camera



Luminescent devices



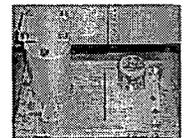
Well logging sources



Soil density gauges



Static eliminator



Industrial gauges

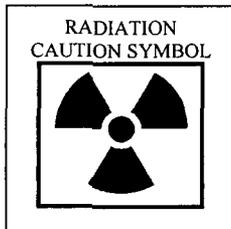




Fact Sheet

Commonwealth of Pennsylvania • Department of Environmental Protection

DISPOSAL OF RADIOACTIVE SOURCES

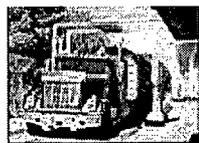


Pennsylvania Department of Environmental Protection (DEP) regulations in 25 Pa. Code, Chapters 271-285, amended Dec. 23, 2000, and Chapters 287-299, amended Jan. 13, 2001, require that certain solid waste facilities monitor incoming waste for

radioactivity. The program is described in the "Final Guidance Document on Radioactivity Monitoring at Solid Waste Processing and Disposal Facilities," document number 250-3100-001. The department's Bureau of Radiation Protection has prepared this fact sheet to inform regulated waste facilities of the options available to dispose of controlled or licensed radioactive material that may be discovered, and is prohibited from disposal at their facilities. This fact sheet provides information related to waste brokers and processors that can safely dispose of the unwanted material.

Our experience indicates that radiation monitoring has identified many discrete radioactive sources that require proper disposal at a licensed low-level radioactive waste facility. If it is determined that radioactive material identified in waste requires controlled disposal, there are several disposal options that may apply. The Bureau of Radiation Protection can assist facilities with evaluating disposal options. DEP will make all required notifications to the appropriate agencies; the facility should not contact agencies other than the DEP. The following options are available for consideration:

Waste Vehicle at Monitoring Station



- 1) The DEP, in cooperation with the waste facility, will assist in the investigation to identify and locate the owner of the material and request that the owner take responsibility for disposal.
- 2) The solid waste facility may choose, or be required, to contract and fund disposal of the material with a radioactive waste broker. The Conference of Radiation Control Program Directors (CRCPD) maintains a listing of

radioactive waste brokers and service providers on its website. The web address is:

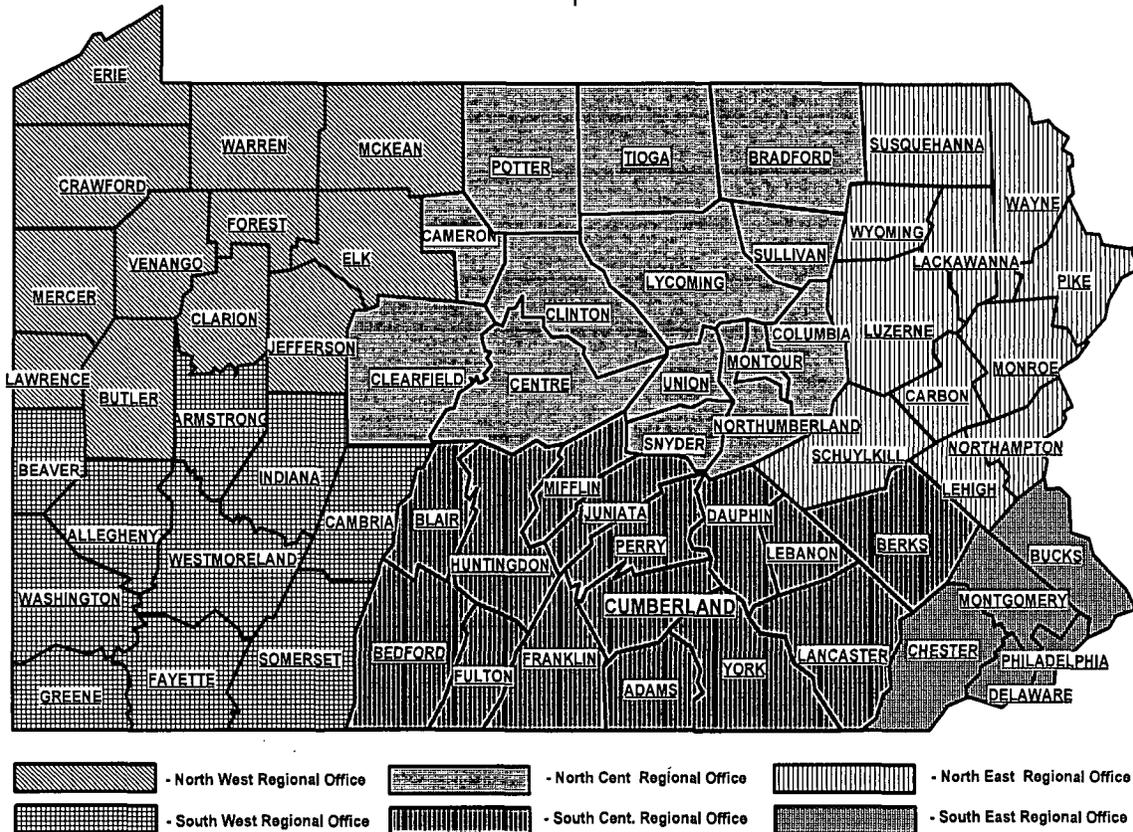
<http://www.crcpd.org/CommercialServices/Brokers.pdf>

- 3) In the past, DEP has assisted in funding the disposal of orphan radium 226 sources through the CRCPD, and could continue to fund this disposal option in the future as long as CRCPD is provided with resources by the federal government.
- 4) Radioactive materials found that are subject to control by the Nuclear Regulatory Commission (NRC) or any Agreement State require notification of the NRC or the Agreement State. These agencies may assist in disposal or transfer of the source.
- 5) The U.S. Environmental Protection Agency (EPA) maintains the National Response Center. This center can be mobilized to respond to any radiation incident or emergency. EPA can arrange disposal of sources under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), aka "Superfund," regulations if the sources are orphaned, e.g. licensable quantity and not traceable to a licensee.
- 6) The Department of Defense (DOD) may take possession of military items that are under its radioactive materials license including radium or tritium luminous markers, gun sights, or gauges.
- 7) The Department of Energy (DOE), through its Off-Site Source Recovery Project, may take possession of high-risk commercial sources. This may require a request from the NRC.

In most cases, onsite source storage will be required while arrangements are made for disposal of the radioactive material, and an investigation is conducted to determine the responsible party. Each facility is required within its Radiation Protection Action Plan to have a "designated area" for secure and protected onsite storage of such material. The most important action that must be taken following the discovery of prohibited radioactive material is to maintain positive control, isolate it from personnel, and follow the facility Radiation Protection Action

Plan. Please call the DEP Bureau of Radiation Protection any time you have questions regarding orphan radioactive material or the appropriate response to radiation alarms.

For more information, visit DEP's website at www.dep.state.pa.us, Keyword: "DEP Radiation."



| Department of Environmental Protection | | |
|--|--|--|
| <p>Radiation Protection Program Manager Business hours: (412) 442-4000</p> <p>Northwest Region: Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango and Warren Counties. Emergency Coordinator Non-business hours: (800) 373-3398</p> <p>Southwest Region: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington and Westmoreland Counties. Emergency Coordinator Non-business hours: (412) 442-4000</p> | <p>Radiation Protection Program Manager Business hours: (717) 705-4700</p> <p>Northcentral Region: Bradford, Cameron, Clearfield, Centre, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga and Union Counties. Emergency Coordinator Non-business hours: (570) 327-3696</p> <p>Southcentral Region: Adams, Bedford, Berks, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry and York Counties. Emergency Coordinator Non-business hours: (877) 333-1904</p> | <p>Radiation Protection Program Manager Business hours: (484) 250-5900</p> <p>Northeast Region: Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne and Wyoming Counties. Emergency Coordinator Non-business hours: (570) 826-2511</p> <p>Southeast Region: Bucks, Chester, Delaware, Montgomery and Philadelphia Counties. Emergency Coordinator Non-business hours: (484) 250-5950</p> |

1.0 SCOPE & APPLICABILITY

- 1.1 This procedure establishes requirements for the use of the US DOT transportation exemptions, numbered DOT-E 11406 and DOT-E 10656. DOT Exemptions were issued to the Conference of Radiation Control Program Directors (CRCPD) to allow one-way transport of low risk radiologically contaminated solid waste and scrap metals.
- 1.2 DOT E-10656 is to be used for shipments of scrap metal and similar materials to be used in the metal-making process (e.g., processed minerals), which were discovered in transit as containing abnormal levels of radiation. Metal manufacturing and scrap processing facilities most commonly use this exemption.
- 1.3 DOT E-11406 is to be used for shipments of waste products, which were discovered in transit as containing abnormal levels of radiation. This exemption is most commonly used by waste facilities, including disposal and transfer facilities.
- 1.4 DOT exemptions ONLY APPLY to shipments where radioactive materials were discovered while in transit, and only for the purposes of disposition of metal or waste products.

NOTE: The Pennsylvania Exempt Material Transportation Approval (EMTA) is another option that may be used to allow one-way transport of "household waste" contaminated with short-lived medical isotopes for disposal purposes. Requirements and guidance for the use of the EMTA form is provided in BRP-RM-04, Use of PA Exempt Material Transportation Approvals.

2.0 DEFINITIONS

- 2.1 *Exemption value* means either an exempt material activity concentration or an exempt consignment activity limit listed in the table in 49 CFR 173.436, or determined according to the procedures described in 49 CFR 173.433, and used to determine whether a given physically radioactive material is sufficiently radioactive to be subject to the HMR (see definition of radioactive material). An exemption value is different from an exemption, as defined in 49 CFR 171.8.
- 2.2 *Household waste* means any material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas). Ref. 40 CFR 261.4, Exclusions.
- 2.3 *Radioactive material* means any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in the table in 49 CFR 173.436 or values derived according to the instructions in 49 CFR 173.433. (NOTE: Material containing radionuclides as determined by 49 CFR 173.436 or the values derived according to instruction in 49 CFR 173.433 are subject to DOT transport regulations)

3.0 PREREQUISITES and LIMITATIONS

- 3.1 This procedure is informational in nature; instructions and requirements for the use of DOT Exemption forms have been included for convenience of the user. The registered authority must be familiar with, and abide by, the requirements included in the exemption instructions.
- 3.2 DOT Exemption forms are used for exemption from certain US DOT hazardous (radioactive) material shipping requirements. The United States Department of Transportation (US DOT) is the governing body for transport of hazardous materials in the United States.

USE OF DOT EXEMPTIONS

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- 3.3 Title 49 of the Code of Federal Regulations (49CFR) is referenced throughout this procedure and should be used in conjunction with this procedure when evaluating related issues.
- 3.4 Only qualified individuals may perform interpretation and analysis regarding the nature of the hazard and its applicability.
- 3.5 The DOT exemption approval form and other provisions of the exemption satisfy the emergency information and training requirements of 49 CFR 172, Subpart G and Subpart H, and the modal Class 7 material requirements of Part 174, Subpart K and Part 177, Subpart B.
- 3.6 US DOT hazardous (radioactive) waste shipping regulations do not apply (and exemption is not required) to the following materials:
- a. Materials **not** identified as hazardous materials, or hazardous waste, in 40 CFR 261 (*household waste* is included).
 - b. Material at or below the *Exemption value*. (Note that a US DOT exemption is required for transport of TENORM unless sample data indicates it is less than the *Exemption value* as defined above). Reference 49 CFR 173.403, Definitions.
 - c. Class 7 (radioactive) materials that have been implanted or incorporated into, and are still in, a person or live animal for diagnosis or treatment. Reference 49 CFR 173.401(b)(2).
 - d. Radioactive materials that have been injected into, ingested by, or are otherwise placed into, and are still in, human beings or live animals. Reference 49 CFR 173.401(b)(3).
 - e. Natural material and ores containing naturally occurring radionuclides which are not intended to be processed for use of these radionuclides, provided the activity concentration of the material does not exceed 10 times the values specified in 49 CFR 173.436. Reference 49 CFR 173.401(b)(4).
- 3.7 Only personnel who are registered with the CRCPD are authorized to issue exemptions. Personnel who are registered to authorize these exemptions are listed on the CRCPD website at: http://www.crcpd.org/Transportation/Auth_Reg_Approve/Auth_Reg_Approve_List.htm
- 3.8 Radiological limits that apply to the use of DOT-E 11406 & DOT-E 10656 are:
- 3.9 The dose rate limit is 0.50 mSv/hr (50 mR/hr) at the external surface of the conveyance.
- 3.10 Department policy is to limit radiation levels in the conveyance cab to less than 0.02 mSv/hr (2 mR/hr) and conveyance external contamination levels to less than 0.4 Bq/cm² (22 dpm/cm²), averaged over an area of up to 600 cm².
- 3.11 DOT Exemption forms and additional guidance are available from the CRCPD website at http://www.crcpd.org/Transportation_related_docs.asp or the BRP website at Monitoring for Radioactive Materials in Solid Waste.
- 3.12 The tracking system for DOT Exemptions is maintained on the network at ERMaster1/EPENCOFS04/Radiation Protection/DOT Exemption Tracking.

NOTE

Out of country codes for exemptions are AB=Alberta, BC=British Columbia, MB=Manitoba, NF= Newfoundland, NS= Nova Scotia, ON=Ontario, QC=Quebec, SK=Saskatchewan, NB=New Brunswick, MX=Mexico

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- 3.13 The Exemption numbering convention is X1-X2-YY-nn, where "X1" is the state of shipment origin (two letter postal code, e.g., "PA"), "X2" is the state where the shipment is going (use similar two-letter postal code), "YY" is the last two digits of the current year, and "nn" is the sequential designator for the particular shipment.

4.0 PERSONNEL RESPONSIBILITIES

- 4.1 Regional Radiation Protection Program Manager or authorized RP Program staff:
- a. Maintain current hazardous material transportation training.
 - b. Review the radiological condition of the waste.
 - c. Evaluate the risk associated with transport of the material, under the conditions of the exemption and ensure that the risks do not exceed the risk associated with normal transport of radioactive materials.
 - d. Issue and distribute DOT exemptions in accordance with instructions provided with the exemption form and section 5.0 below.
 - e. Forward a copy of the completed form to the Central Office, RP.
- 4.2 Central Office, Radiation Control Division
- a. Maintain the database for numbering exemption forms.
 - b. Maintain a file of completed exemption forms.

5.0 EXEMPTION FORM COMPLETION AND ROUTING

- 5.1 Obtain the information necessary to evaluate the load from the facility that detected the material.
- 5.2 Obtain the next applicable exemption number from the log (see 3.10 above).
- 5.3 Complete all requested information on the applicable DOT Exemption form in the State Radiation Control Officials block on page 1.
- 5.4 Complete requested information on page 2 concerning identification of suspect radioactive material.
- 5.5 Complete the Destination and Approval for Shipment section. Contact names, addresses, telephone and fax numbers can be found in the CRCPD Directory (CRCPD Publication YY-01, where "YY" is the last two digits of the current year).
- 5.6 Instruct the shipper to provide a copy of the shipment approval form and the exemption text to the vehicle operator.
- 5.7 Instruct the shipper to ensure the transport vehicle operator (driver) carries a copy of the approval form in the cab of the vehicle.

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- 5.8 Instruct the shipper to ensure the shipment is transported over the most appropriate route without unnecessary or avoidable delay.
- 5.9 Instruct the shipper to notify the National Response Center, and the State Official authorizing the shipment, of any incident involving the shipment. The contact at the National Response Center is the Associate Administrator for Hazardous Materials Safety at 1 (800) 424-8802.
- 5.10 Forward copies to the following personnel, this distribution is normally made by fax and should be made in advance of the shipment:
 - a. Office of the Executive Director, CRCPD
 - b. Cognizant person at the facility where the radioactive material was discovered.
 - c. Cognizant person at the transporting facility.
 - d. Cognizant person at the shipment originating facility
 - e. Cognizant person at the facility where the radioactive material will be shipped.
 - f. State radiation protection official having authority receiving the shipment.
 - g. State radiation protection official having authority over the facility or company from which the shipment originated
 - h. Central Office, Radiation Control Division for file retention
- 5.11 If the waste is shipped to an intermediate facility for identification, then additional notifications are required after identification is performed. Complete the Identification and Disposition portion of the form and forward copies to the following personnel:
 - a. Office of the Executive Director, CRCPD
 - b. State official at the originating state
 - c. State official issuing the shipment approval form
 - d. State official where identification and disposition occurred.

6.0 REFERENCES

- 6.1 US DOT transportation exemptions, numbered DOT-E 11406 & DOT-E 10656
- 6.2 40 CFR PART 261; IDENTIFICATION AND LISTING OF HAZARDOUS WASTE
- 6.3 49 CFR PART 173; SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

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- 6.4 Title 25 Pa. Code, Chapters 271-285, amended December 23, 2000, and Chapters 287-299, amended January 13, 2001
- 6.5 PA DEP document number 250-3100-001, "Final Guidance Document on Radioactivity Monitoring at Solid Waste Processing and Disposal Facilities"
- 6.6 PA DEP Operating Procedure number BRP-RM-04, "Use of PA Exempt Material Transportation Approvals"

Pennsylvania Department of Environmental Protection Bureau of Radiation Protection

BRP-RM-04 USE OF PA EXEMPT MATERIAL TRANSPORTATION APPROVALS

Revision 1, March 11, 2005
INTERNAL USE ONLY



Scott Wilson
Originator: *Scott Wilson - Signature on file.* Date: 03/10/2005

Eastern Area: *Terry Derstine - Signature on file.* Date: 03/10/2005

Central Area: *John Maher - Signature on file.* Date: 03/10/2005

Western Area: *Jim Yusko - Signature on file.* Date: 03/10/2005

Radiation Control
Division Chief: *Ronald Hamm - Signature on file.* Date: 03/10/2005

Radiation Control
Division Manager: *Ray Urciuolo - Signature on file.* Date: 03/10/2005

1.0 SCOPE & PURPOSE

- 1.1 This document establishes staff guidance for the use of the PA DEP/BRP EXEMPT MATERIAL TRANSPORTATION APPROVAL FORM FOR HOUSEHOLD MUNICIPAL WASTE (EMTA), 2900-FM-RP0045.
- 1.2 The purpose of the EMTA form is to provide a mechanism in which to inform the driver, receiving facility personnel, and emergency personnel (in case of accident), of the identified radioactive isotopes contained within a solid waste material conveyance, including the dose rate and approximate location within the load, if the need to transport the material over public roads exists.

2.0 INTRODUCTION

- 2.1 The United States Department of Transportation (DOT) has determined that household waste, laden with short-lived medical-use radioactive isotopes, do not qualify as hazardous waste and therefore a DOT Exemption is not required to transport this waste. Ref.
<http://intrabrp/SolidWasteRadMonitoring/SolidWasteRadiationMonitoring.htm>
- 2.2 Since the waste described above is non-regulated, and the likelihood exists that such wastes will alarm radiation monitors at Solid Waste Facilities regulated under PA Law, the Department has determined that a mechanism is needed to inform the driver, receiving facility personnel, and emergency personnel (in case of accident) of the radioactive constituents of the cargo if transport over public roads is required. The EMTA form is designed to serve this purpose.

3.0 REQUIREMENTS FOR USE

- 3.1 Solid Waste facilities must either notify the Department in writing of their intent to use the EMTA form, or modify their approved Radiation Protection Action Plan (RPAP) in order to use the EMTA form. Without this documentation the facility is in violation of their RPAP when using the EMTA form.
- 3.2 Use of the EMTA form is limited to household waste.
- 3.3 The EMTA form may be used for intrastate use only.
- 3.4 The specific use requirements listed on the EMTA form must be adhered to.
- 3.5 The EMTA form and directions for completion are available from the PA DEP eLibrary, under Forms, Radiation Protection, Radiation Control, 2900-FM-RP0045.

4.0 PERSONNEL RESPONSIBILITIES

4.1 DEP staff (inspectors and physicists)

- 4.1.1 Ensure proper use of the form by administrative review of the documents when inspecting the facility.
- 4.1.2 Respond to facility compliance assistance inquiries concerning EMTA use.
- 4.1.3 Investigate and report use violations.

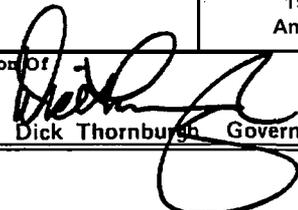
4.2 Chief, Radiation Control Division

- 4.2.1 Review revisions of the approval form as needed.
- 4.2.2 Provide decisive conflict resolution regarding the form as needed.

5.0 FORM COMPLETION AND ROUTING

- 5.1 The EMTA forms are completed by the originating facility (where the alarm occurred). Instructions for completion are included in the eLibrary Forms folder.
- 5.2 The accepting facility must agree to take the waste.
- 5.3 The form must be signed and dated by the originating facility representative.
- 5.4 A copy of the form must be presented to the driver prior to exiting the facility.
- 5.5 A copy of the form must be retained at the originating facility for Departmental review.

Commonwealth of Pennsylvania
GOVERNOR'S OFFICE
EXECUTIVE ORDER

| | | | |
|----------------------|-------------------|---|------------------------------|
| Subject | | Code of Conduct | Number 1980-18 Amended |
| Date May 16, 1984 | Distribution B | By Direction Of  Dick Thornburgh, Governor | |

WHEREAS, there continues to be a need to insure that the citizens of our Commonwealth have complete confidence in those individuals appointed and employed to serve the Commonwealth; and

WHEREAS, the ability of our Commonwealth to provide governmental services in an efficient fashion is endangered whenever acts of misconduct by appointed officials or employees occur; and

WHEREAS, the General Assembly of our Commonwealth has from time to time enacted legislation designed to establish standards of conduct applicable to appointed officials and state employees; and

WHEREAS, the Governor is determined to have all possible measures taken to insure that public confidence is maintained in the Government of our Commonwealth.

NOW, THEREFORE, I, Dick Thornburgh, as Governor of the Commonwealth of Pennsylvania, by virtue of the authority vested in me by the Constitution of the Commonwealth of Pennsylvania and other laws, do hereby promulgate the following Code of Conduct, which shall apply to officials and employees of the Commonwealth as follows:

PART I

RESTRICTED ACTIVITIES; CONFLICTS OF INTEREST

No employe, appointee or official in the Executive Branch of the Commonwealth shall:

1. Adverse pecuniary interest.

a. Engage directly or indirectly in any business transactions or private arrangement for profit which accrues from or is based upon his or her official position or authority.

b. Participate in the negotiation of or decision to award contracts, the settlement of any claims or charges in any contracts, the making of loans, the granting of subsidies, the fixing of rates, or the issuance of permits, certificates, guarantees or other things of value to, with or for any entity in which he or she has a financial or personal interest.

2. Representation of interests. Represent or act as agent for any private interest, whether for compensation or not, in any transaction in which the state has a direct and substantial interest and which could be reasonably expected to result in a conflict between a private interest of the official or employe and his official state responsibility.

3. **Gifts and favors.** Solicit or accept for the personal use of himself or herself or another, any gift, gratuity, favor, entertainment, loan, or any other thing of monetary value from a person who:
- a. Is seeking to obtain business from or has financial relations with the Commonwealth.
 - b. Conducts operations or activities that are regulated by the Commonwealth.
 - c. Is engaged, either as principal or attorney, in proceedings before the Commonwealth or in court proceedings in which the Commonwealth is an adverse party.
 - d. Has interests that may be substantially affected by the performance or nonperformance of the employe's official duty.

The only exceptions are limited to:

- (1) The solicitation or acceptance of something of monetary value from a friend, parent, spouse, child or other close relative when the circumstances make it clear that the motivation for the action is a personal or family relationship;
- (2) Acceptance of food and refreshment of nominal value on infrequent occasions in the ordinary course of a luncheon or dinner meeting or other meeting;
- (3) The acceptance of loans from banks or other financial institutions on customary terms of finance for proper and usual activities, such as home mortgage loans;
- (4) Acceptance of unsolicited advertising or promotional material, such as pens, pencils, note pads, calendars, and other such items of nominal intrinsic value;
- (5) Receipts of bona fide reimbursement for actual expenses for travel and such other necessary subsistence as is compatible with other restrictions set forth in this part and for which no Commonwealth payment or reimbursement is made. However, an employe may not be reimbursed, and payment may not be made on his or her behalf, for excessive personal living expenses, gifts, entertainment or other personal benefits nor may an employe be reimbursed by a person for travel on official business under Commonwealth orders;
- (6) Participation in the affairs of or acceptance of an award for a meritorious public contribution or achievement from a charitable, religious, professional, social, fraternal or nonprofit educational, recreational, public service or civic organization;
- (7) A voluntary gift of nominal value or donation in a nominal amount made on a special occasion such as marriage, illness, or retirement; and
- (8) A plaque, memento or gift of nominal value offered as a token of esteem or appreciation on the occasion of a public appearance, visit, speech or the like.

4. **Misuse of information.** For his or her own personal gain or for the gain of others, use any information obtained as a result of service or employment with the Commonwealth and not available to the public at large or divulge such information in advance of the time prescribed for its authorized release.

5. **Misuse of office facilities and equipment.** Use any Commonwealth equipment, supplies or properties for his or her own private gain or for other than officially designated purposes.

6. **Supplementary employment.** Engage in or accept private employment or render services for a private interest unless such employment or service is approved in advance by the Head of the Agency to which the affected person is assigned. Supplementary employment may be undertaken only when not in conflict with the conditions of employment regulations promulgated by the Executive Board and, if applicable, the Civil Service Commission. Furthermore, supplementary employment may be undertaken only when not in conflict with the conditions of employment or regulations promulgated by the government agency by which such official or employe is employed. This paragraph shall not prohibit individuals appointed to serve part-time on Boards and Commissions from pursuing their usual occupation; however, they will not perform services or receive compensation from persons or institutions which they regulate or otherwise conduct themselves in a manner inconsistent with the impartial administration of their official duties.

7. **Honoraria.** Accept honoraria, speaking fees, or any other valuable consideration. Nor shall any appointed official or state employe receive compensation for consultation which draws upon ideas or data derived from his or her official duties. However, Commonwealth officials or employes may designate non-profit, charitable organizations to be recipients of honoraria or speaking fees offered to such Commonwealth employes or officials by groups which customarily offer such honoraria to guest speakers. This paragraph shall not apply to individuals appointed to serve on Boards and Commissions who may not, however, accept such honoraria from groups that are regulated by the board or commission on which they serve, or which could otherwise raise a legitimate question about their ability to fairly and impartially perform their official duties.

8. **Political Activity.**

a. Engage in any political activity such as campaigning, fundraising, canvassing or poll watching during his or her specified working hours, or which is determined by the Secretary of Administration to conflict or interfere with the ability of the affected official or employe to effectively and efficiently carry out the duties and functions of his or her position.

b. In any manner coerce any other person in government service or employ to contribute time, money or services to a political candidate or campaign.

9. **Enforcement.** Officials, appointees or employes who refuse or fail to comply with the regulations set forth herein shall be subjected to disciplinary action including, but not limited to, reprimands, suspensions, and termination.

PART II

FINANCIAL DISCLOSURE

1. **Executive Branch - Statements of Financial Interest.** The following officials and employes of the Commonwealth shall file Statements of Financial interest with the personnel office of their respective department, agency, board or commission, or other office as designated hereafter:

a. Governor.

b. Lieutenant Governor.

c. Heads of agencies and departments, their respective deputy secretaries, all Commonwealth officials or employes at the level of division chief and above, and all attorneys, press secretaries, legislative liaisons, and executive and special assistants.

d. Chairpersons and members of compensated boards and commissions under the Governor's jurisdiction.

- e. Executive directors, counsel, and administrative secretaries of compensated boards and commissions under the Governor's jurisdiction.
- f. Employees of all classes required by the Office of Administration to file financial disclosure under Act 170, the State Ethics Act.

2. **Additional Filings.** The Governor may require other officials or employees of the Commonwealth in the executive branch to file financial disclosure statements.

3. **Filing Procedure.** a. Financial disclosure statements shall be filed on forms promulgated by the Secretary of Administration and provided by the Office of Personnel of the Department or Agency to which the affected official or employe is assigned, which office shall receive, compile, and maintain copies of such statements. Personnel offices shall provide necessary assistance in assuring that financial disclosure statements are filed properly, accurately, and completely. Copies of statements filed shall be forwarded to the Department or Agency Head and their Chief Counsel for review. If either of them determines a statement is not in compliance with the disclosure requirements of this Order, or that a conflict of interest could exist, copies of the statement shall be forwarded to the Secretary of the Department, the Secretary of Administration, and the General Counsel, who shall determine whether such statement is in compliance or whether a conflict exists and take appropriate action.

b. Cabinet officials, as well as the Governor and Lt. Governor, shall submit statements of financial interest to the Secretary of Administration and the General Counsel. The Secretary and Counsel shall review such statements and take appropriate action to insure compliance and to insure against any conflict of interest.

c. The Secretary of Administration and the General Counsel shall submit statements to the Governor.

d. Financial statements filed hereunder shall not be open to persons for commercial purposes; however, they shall be available, upon request, for inspection by accredited reporters employed by general news organizations, as well as the Secretary of Administration and the General Counsel, and, in the case of the Department of Transportation, the Inspector General. Persons required to file statements pursuant to this Order shall do so within 30 days from the date he or she assumes office and, further, shall file such statements on May 1st of each year thereafter (for the preceding calendar year) for the duration of his or her term of office.

e. In the event any covered person fails or refuses to file a financial statement, the appropriate official shall notify such person of his or her noncompliance within ten days of the date of notice. Failure of any covered person to comply after receipt of the notice may be a basis for removal from office. The Head of the Department or Agency involved shall report failure of any person to comply to the Secretary of Administration and the General Counsel.

4. **Required Disclosures.** All persons subject to this Order shall disclose the following information, as well as such information as may be required by the State Ethics Commission:

a. **Real Estate Property Interests.** All in-state and out-of-state real estate property interests including revenue-producing leased facilities and interests in gas, oil, coal, or other mineral royalty or lease (home of principal residence is to be excluded). The required schedule shall include, as to each disclosed interest:

(1) The name and nature of the property, its street or mailing address, and a description thereof;

(2) The nature and extent of the interest held, including any conditions or encumbrances upon the property interest and partners in the interest;

(3) The identity of the person from whom such interest was acquired, the date thereof, and the manner of the transfer or conveyance; and

(4) The transfer of any real property interest since the last required report was filed or since appointment or election, whichever occurs later. A description of the transferred interest, consideration received therefor, and the identity of the transferee shall be required.

b. Personal Economic Interest. All investments (including but not limited to stocks, notes, bonds, consulting arrangements, etc.) in any in-state or out-of-state business entity, whether or not such entity is involved in any transaction involving the Commonwealth. The required schedule shall include as to each such interest:

- (1) The name and address of the principal office of the business entity;
- (2) The nature of interest held, including conditions and encumbrances; and

(3) The transfer of any interest or portion thereof since the last required report was filed or since appointment or election, whichever is later. A description of the transferred interest and the identity of the transferee shall be required.

c. Business Interests. All interests (including but not limited to stocks, notes, bonds, partnerships, joint ownerships, proprietorships, etc.) in any business entity or not-for-profit entity doing business with the Commonwealth (if known). For purposes of this schedule, "interests" shall include not only personal economic interest but also such interests as non-paid memberships on boards of directors of business entities or not-for-profit entities. The required schedule shall include the following as to each such interest:

- (1) The name and address of the principal office of the business entity;
- (2) The nature and dollar value of interest held including conditions thereto and encumbrances thereon; and

(3) The transfer of any interest or portion thereof since the last required report was filed or since appointment or election, whichever is later. A description of the transferred interest and the identity of the transferee shall be required.

d. Gifts. All gifts of a value in excess of \$100, including the forgiveness of a debt, received since the last required report was filed or since appointment or election, whichever is later. For the purposes of this section, gifts from family members need not be disclosed. The required schedule shall include:

- (1) The nature and value of the gift and
- (2) The identity of the person from whom, or on behalf of whom directly or indirectly, the gift was received.

e. Employment (excluding Commonwealth employment). All payments, compensation, or consideration of any nature for services rendered or to be rendered. Such payments, compensation, or consideration shall include, but not be limited to offices, directorships, salaried employment, consultant fees, honoraria (travel and related expenses), and other fees earned since the last required report was filed or since appointment or election, whichever is later. This required report shall include:

- (1) The name and address of the office of the person for whom such services are or will be rendered;

- (2) The title or nature of the service; and
 - (3) The total amount of compensation or consideration received.
- f. **Liabilities.** All liabilities owed to any person or institution since the last required report was filed, or since appointment or election, whichever is later, excluding retail credit accounts, commercial banks, savings and loan, and finance companies. This required schedule shall include:
- (1) The identity of the person or institution to whom the liability is owed;
 - (2) The terms of payment of the liability;
 - (3) The amount of liability;
 - (4) The manner in which the liability was secured; and
 - (5) Any changes in the nature or amount of any liability since the last required report was filed.

PART III

CRIMINAL CHARGES

Procedures to be followed by agencies under the Governor's jurisdiction in regard to employes, and officials appointed by the Governor, who are formally charged with criminal conduct:

1. **Definitions.**

a. **Agency:** All departments, boards, commissions, and other government units under the Governor's jurisdiction.

b. **Criminal Conduct Related to His or Her Employment with the Commonwealth:** Conduct by an employe in violation of a criminal law arising in the course of or from the performance of an official duty or function; including, but not limited to, violations of law constituting misfeasance or malfeasance in office.

c. **Employe:** Individuals employed by, or appointed to serve on, an agency, board, commission or department of the Commonwealth. However, the term "employe" shall not include those individuals who are members of the Pennsylvania National Guard who are not otherwise employed by the Commonwealth.

d. **Formally Charged with Criminal Conduct:** An employe shall be deemed to be formally charged with criminal conduct when he or she has been arrested or named as a defendant in an indictment or information or, in the case of a private complaint, the complaint has been approved by the prosecuting authority.

e. **Sufficient Reason for Disciplinary Action:** "Sufficient reason for disciplinary action" shall be determined by the exercise of discretion of the Head of the Agency which employs such person, or his or her designee; except that, to the extent required by statute or contract, for those employes within the classified service and/or those employes covered by provisions of a collective bargaining agreement, "sufficient reason" for disciplinary action shall mean "just cause."

2. Required Action When an Employee is Formally Charged with Criminal Conduct Related to His or Her Employment with the Commonwealth or which Constitutes a Felony. As soon as practicable after an employe has been formally charged with criminal conduct related to his or her employment with the Commonwealth or which constitutes a felony, such employe shall be suspended without pay. If such charge results in conviction in a court of law, such employe shall be terminated.

3. Required Action When an Employee is Formally Charged with Criminal Conduct other than a Felony and Not Related to His or Her Employment with the Commonwealth. As soon as practicable after an employe is formally charged with criminal conduct other than a felony and not related to his or her employment with the Commonwealth, the Head of the Agency which employs such person, or his or her designee, shall conduct an inquiry and make a preliminary determination as to whether or not the employe should continue to perform his or her duties pending the outcome of the investigation and final determination in accordance with paragraphs 4 and 5, below.

a. **Purpose.** The purpose of the preliminary determination is to allow the agency to minimize the effect which the accusation of the commission of a crime by one of its employes may have upon the agency's ability to function pending an investigation and final determination by the appointed authority or his or her designee as to the existence of sufficient reason for disciplinary action against the employe.

b. **Making the Preliminary Determination.** In making a preliminary determination, the Agency Head or his or her designee shall select one of the three following alternatives and implement it as regards the employe:

(1) Allow the employe to continue to perform duties pending the outcome of the investigation and final determination; or

(2) Reassign the employe to other, less sensitive duties within the agency pending the outcome of the investigation and final determination; or

(3) Suspend the employe without pay pending the outcome of the investigation and final determination.

c. **Factors to be Considered in Making the Preliminary Determination.** In making the preliminary determination, the Agency Head shall consider, among other factors, the following:

(1) The employe's explanation, if available;

(2) The extent to which allowing the employe to continue in his or her position would be detrimental to the physical well-being of the employe, his or her fellow workers, or other persons;

(3) The nature of the employe's duties, including the amount of discretion exercised as part of those duties;

(4) The nature, weight, basis, and source of the accusations against him or her;

(5) The relationship of the accusations to the employe's duties;

(6) The extent to which the employe must deal directly with the public;

(7) The extent to which the accusations of wrongdoing may affect the public's trust and confidence in the employe, the agency, and state government; and

(8) Any undue hardship to the employe which would result from his or her temporary reassignment.

d. **Contact with Law Enforcement Agency.** In considering the nature, weight, and source of the accusations against an employe, the agency shall contact the law enforcement agency involved in the accusations against the employe to verify the charge and to obtain all available information as to the charges against the employe.

e. **Employe Status.** After the preliminary determination is made, employes shall remain in the status selected pending the outcome of the investigation and final determination in accordance with paragraphs 4 and 5, below. This status shall be temporary, pending the outcome of the investigation by the agency, and shall in no way bear upon the Agency Head's final determination.

4. **Investigation.** Any employe formally charged with criminal conduct, as referred to in paragraph 3, shall be subject to an immediate investigation conducted by the Agency Head or his or her designee.

a. **Purpose.** The purpose of this investigation shall be to determine whether sufficient reason exists for disciplinary action including, but not limited to, suspension without pay, demotion, or dismissal.

b. **Conduct of the Investigation.** In the investigation, all the relevant facts shall be promptly gathered and considered. The agency's chief counsel may assist the Agency Head or his or her designee in making the investigation. The investigation shall be completed within twelve (12) working days from the date on which the Secretary of Administration is notified pursuant to paragraph 6, below. An extension of this period may be granted only by the Secretary of Administration, in writing, and only on a showing, in writing, by the Agency Head or his or her designee of a conscientious effort to meet the deadline and an explanation of the reasons why that deadline cannot be met. Only one such extension may be granted, which extension shall not exceed twelve (12) working days.

(1) Law Enforcement Agencies. In the investigation, the Agency Head or his or her designee may request the assistance of any law enforcement agency involved in the matter; however, this shall not relieve the appointing authority or his or her designee of the responsibility to make an independent evaluation.

(2) Employe Contact. In the investigation, the Agency Head or his or her designee shall afford the employe an opportunity to explain the accusations made against him or her, and the opportunity to have representation during any meetings which relate to the investigation, if such representation is requested, and the opportunity to submit such additional information as the employe may wish to provide.

5. **Final Determination.** a. After completion of the investigation, the Agency Head shall have five (5) working days to make a final determination as to whether the results of the investigation establish sufficient reason for disciplinary action and, if established, what disciplinary action shall be taken. The Secretary of Administration and the General Counsel shall review this decision and ratify the decision of the Agency Head absent an abuse of discretion. An extension of this period may be granted only by the General Counsel or his designee, in writing, and only on a showing, in writing, by the Agency Head of a conscientious effort to meet the deadline and an explanation of the reasons why that deadline cannot be met. Only one such extension may be granted, which extension shall not exceed five (5) working days.

b. In determining whether sufficient reason for disciplinary action exists, the Agency Head shall consider, among other factors, all of the following:

(1) The employe's explanation, if available;

(2) The extent to which allowing the employe to continue in his or her position would be detrimental to the physical well-being of the employe, his or her fellow workers, or other persons;

(3) The nature of the employe's duties, including the amount of discretion exercised as part of those duties;

(4) The nature, weight, and source of the accusations against him or her;

(5) The relationship of the accusations to the employe's duties;

(6) The extent to which the employe must deal with the public; and

(7) The extent to which the accusations of wrongdoing may affect the public's trust and confidence in the employe, the agency, or state government.

c. If sufficient reason for disciplinary action is determined to exist, the Agency Head shall immediately take appropriate disciplinary action including, but not limited to, suspension of pay, demotion, or dismissal, which action shall be reviewed by the Secretary of Administration and the General Counsel and ratified by them absent a finding of abuse of discretion.

d. If, based on information available at that time, a finding of sufficient reason is not made, the employe shall be notified of the disposition and shall retain or be retroactively reinstated to his or her previous position.

e. The subsequent availability of pertinent information shall require an appointing authority or his or her designee to reconsider the previous disposition and renew investigation into the conduct at issue.

6. Notification of the Secretary of Administration. When an employe has been charged with criminal conduct, the Agency Head or his or her designee shall immediately notify the Secretary of Administration of the name and position of the employe, the criminal charges against the employe, and of the initiation of any agency investigation. Any action taken with regard to the employment status of the employe and the disposition of such criminal charges shall also be reported to the Secretary of Administration.

7. Criminal Charges against the Head of an Agency. Whenever a criminal charge involves the Head of an Agency, the steps set forth in this Part shall be followed as in the case of any other agency employe or official, except that the determinations and actions required shall be performed by the Secretary of Administration and subject to review by the Governor and the General Counsel.

RESCISSIONS. Executive Orders 1974-6 (4 Pennsylvania Code 7.151) and 1978-7 (4 Pennsylvania Code 7.71) are rescinded. This amended Order replaces Executive Order 1980-18, dated September 3, 1980, and Revisions I-9 thereto.



Commonwealth of Pennsylvania
GOVERNOR'S OFFICE
EXECUTIVE ORDER

| | | |
|----------------------------------|--------------|---|
| Subject | | Number |
| Code of Conduct - Revision No. 1 | | 1980-18 Amended |
| Date | Distribution | By Direction Of |
| September 28, 1987 | B | <i>Robert P. Casey</i> Robert P. Casey, Governor |

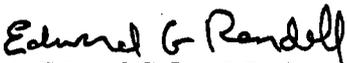
Executive Order 1980-I 8, Part I I, is revised to add:

g. In addition to the above information, all individuals required to file Statements of Financial Interest shall, within 30 days from the date they assume office, disclose any severance payments received or to be received, or any proceeds received or to be received from the sale or redemption of their interest in any corporation (which represents 5% or more of the common stock or assets of the corporation), professional corporation, partnership, or other entity, which payments or proceeds result from the termination of employment or withdrawal from a corporation, professional corporation, partnership, or other entity upon the assumption of public office, and shall file with their Statements of Financial Interest copies of any agreements relating to the receipt of such severance payments or proceeds.

h. In the event that a severance arrangement or sale or redemption of any interest specified in Section g is concluded more than 30 days following the date on which an individual assumes office, he or she shall, within 10 days following the conclusion of this transaction, update the information provided pursuant to Section g by disclosing any payments or proceeds received or to be received and filing any agreements relating to such payments or proceeds.

i. All individuals required to file Statements of Financial Interest, currently holding office or employed by the Commonwealth, who have not previously filed the information required under Sections g and h, shall file such information within 10 days of the effective date of this provision.

COMMONWEALTH OF PENNSYLVANIA
GOVERNOR'S OFFICE
EXECUTIVE ORDER

| | | | |
|----------------|---|-----------------|---------------------------|
| Subject: | | Code of Conduct | Number: |
| | | | 1980-18 Revision No. 3 |
| Date: | By Direction of: | | |
| April 25, 2005 |  Edward G. Rendell, Governor | | |

By virtue of the authority vested in me by the Constitution of the Commonwealth of Pennsylvania and other laws, I, Edward G. Rendell, Governor of the Commonwealth of Pennsylvania, hereby revise *Part I, Section 1 of Executive Order 1980-18, page 1*, as follows:

* * * * *

c. Hold any pecuniary interest in, or own shares or securities issued by, an entity regulated by the *Act of July 5, 2004 (P. L. _____, No. 71)* known as the *Pennsylvania Race Horse Development and Gaming Act* (herein, a "regulated gaming entity").

This provision shall not apply to:

- (1) interests held in mutual funds where the value of the interest owned does not exceed one percent of the total fair market value of the regulated gaming entity;
- (2) interests held through defined benefit pension plans;
- (3) interests held through a deferred compensation plan organized and operated pursuant to section 457 of the Internal Revenue Code of 1986 (Public Law 99-514, 26 U.S.C. § et.seq.);
- (4) interests held in blind trusts over which the holder may not exercise any managerial control or receive income during the time period the holder is subject to these provisions;
- (5) interests held through a tuition account plan organized and operated pursuant to section 529 of the Internal Revenue Code;
- (6) interests held through a plan described in section 401(k) of the Internal Revenue Code;

(7) interests held in an employer profit-sharing plan qualified under the Internal Revenue Code; or

(8) interests held in a regulated gaming entity prior to July 6, 2004, by individuals other than the following:

(a) Employees of the Pennsylvania State Police or the Pennsylvania Department of Revenue whose duties include any aspect of the gaming industry.

(b) Members of the Pennsylvania State Horse Racing Commission or the Pennsylvania State Harness Racing Commission and their respective staff.

(c) Public officials appointed by the Governor and Commonwealth employees under the Governor's jurisdiction.

(d) Members of the board of the Public School Employees Retirement System and its employees.

(e) Members of the board of the State Employees Retirement System and its employees.

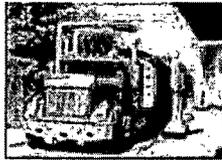
(f) Members of the board of the Independent Regulatory Review Commission and its employees.

Rescission. Executive Order 1980-18 Revision No. 2, dated July 5, 2004, is rescinded.

Pennsylvania Department of
Environmental Protection
Bureau of Radiation Protection

BRP-RM-01
SOLID WASTE RADIATION
PROTECTION ACTION PLAN
INSPECTION PROCEDURE

Revision 0, October 6, 2003
INTERNAL USE ONLY



RECEIVED
NOV 17

Richard Croll RC Date: 10-1-03
Originator

Eastern Area: GA Date: 10/6/03

Central Area: James J. Kopach Date: 10/6/03

Western Area: James G. Justice Date: 26 November 2003

Radiation Control
Division. Chief: Louise P. Minto Date: 12-9-03

1.0 INTRODUCTION

The following procedural guidance is provided for completing a routine compliance inspection of a solid waste Radiation Protection Action Plan (RPAP) at a municipal or residual waste facility. This includes landfills; waste processing facilities and waste transfer stations. It provides detailed instructions for completion of inspections. This does not imply that successfully completing a set of forms constitutes a thorough inspection for all Department solid waste regulations. The form merely provides a statistical summary of an inspection one makes through observation, interview and measurement. Inspectors are encouraged to take a professional interest in each and every inspection, and provide compliance assistance when possible.

The initial inspection is triggered by the construction certification sent in by the facility. The facility sends in this certification after the issuance of the Form 13A approving the RPAP and completion of construction. This inspection may be carried out in conjunction with a Bureau of Land Recycling and Waste Management, BLRWM Inspection. The Radiological Health Physics (RHP) Inspector should coordinate with the appropriate BLRWM inspector to perform the review. Subsequent inspections may be performed by the BLRWM inspector as deemed appropriate. The initial inspection results are normally documented in a letter that BLRWM sends to the facility confirming the RPAP implementation. If a facility has not previously responded to radiation alarms, this letter may also contain a statement that the facility shall continue to inform the BRP of all radiation monitor alarms for a trial period (two month period) and upon completion of the trial period they can operate in accordance with the approved Radiation Protection Action Plan and notify BRP only when required by the plan.

2.0 SURVEY EQUIPMENT

2.1 The inspector's "kit" should contain the following for solid waste facility inspections:

2.1.1 Copy of applicable regulations for waste monitoring at the type facility inspected. Applicable sections of the Pa. Code include:

- 25 Pa. Code 271.1 and 114 for general provisions for municipal waste management
- 25 Pa. Code § 273.133, 140a, 201, 223, 311 and 313 for Municipal Landfills
- 25 Pa. Code § 277.133, 140, 201, 222, 311 and 312 for Construction/Demolition Landfills
- 25 Pa. Code § 279.103, 110, 201, 222, 251 and 252 for Transfer Stations
- 25 Pa. Code § 281.112, 119, 201, 221, 271 and 272 for Composting Facilities
- 25 Pa. Code § 283.103, 113, 201, 220, 261 and 262 for Resource Recovery and Other Processing Facilities
- 25 Pa. Code § 287.1 and 135 for general provisions for residual waste management
- 25 Pa. Code § 288.133, 139, 201, 222, 281 and 283 for Residual Waste Landfills

- 25 Pa. Code § 289.133, 138, 201, 230, 301 and 303 for Residual Waste Disposal Impoundments
 - 25 Pa. Code § 293,103, 111, 201, 223, 251 and 252 for Transfer Stations for Residual Waste
 - 25 Pa. Code § 295.112, 120, 201, 222, 271 and 272 for Composting Facilities for Residual Waste
 - 25 Pa. Code § 297.103, 113, 201, 223, 261 and 262 for Incinerators and other Processing Facilities
- 2.1.2 Final Guidance Document on Radioactivity Monitoring at Solid Waste Processing and Disposal, Document Number: 250-3100-001.
- 2.1.3 Copy of the current radiation action plan for the facility.
- 2.1.4 Copy of the Solid Waste Approval Form 13A that may list any additional conditions.
- 2.1.5 Copy of the most recent inspection result and any open findings.
- 2.1.6 Calibrated instrument capable of measuring background radiation fields ($\mu\text{R/hr}$ or $\mu\text{rem/hr}$) and energy compensated Geiger counter with a range of at least 0.01 mR/hr to more than 50 mR/hr.
- 2.2 The inspector should review the previous inspection results for the two most recent inspections to identify trends and determine if any outstanding corrective actions require review.

3.0 PRELIMINARY

- 3.1 The Inspector should include direct observation of work activities (e.g. waste vehicles monitoring for radiation) as part of the inspection. Under no circumstances shall an inspector knowingly allow an unsafe practice to continue in order to provide a basis for enforcement.
- 3.2 Department policy states that inspectors contact the facility to schedule routine compliance inspections. This permits the facility an opportunity to allot adequate time for inspections. During the scheduling process, the inspector should also allow adequate time to spend at the facilities that may need it. Unscheduled visits are permissible according to the Radiation Protection Act and should be performed once a RPAP is implemented. The following is a summary of what is generally considered a standard beginning to an inspection:
- 3.2.1 Enter the facility and introduce yourself: Good morning, I am _____ with the PA Department of Environmental Protection. I am here to conduct an inspection of your solid waste monitoring program.” Proper DEP identification should be readily available if requested. If personnel do not have proper identification, access to the premises may be rightfully denied.
- 3.2.2 RPAPs are new for most facilities, Inspectors are encouraged to take a professional interest in each and every inspection, and provide compliance assistance if appropriate.

- 3.2.3 During the introduction, the inspector shall interview and meet with the management representative listed in the plan as the Action Plan Supervisor or an alternate management representative of the purpose and scope of the inspection.

4.0 OVERVIEW

Radioactive material monitoring programs and RPAPs will vary in scope depending on the type of facility involved. The following attributes of a typical landfill's radiation inspection are summarized below and provided as a guide. The specific facility's RPAP shall be used as a basis to complete the attached Solid Waste Facility Inspection Form. Use the notes section of the form to include information not specifically mentioned elsewhere on the form.

4.1 Administrative Requirements

- 4.1.1 The RPAP shall be reviewed periodically for content and implementation. It shall be reviewed in response to the following:
 - a. Changes to applicable Department regulations.
 - b. Failure of the action plan during an alarm event.
 - c. Facility operation changes in a manner that would impact implementation of the plan.
 - d. Individual responsible for implementation of the plan changes.
 - e. Monitoring equipment changes.
 - f. Designated area described in the plan changes.
 - g. As required by the Department.

Plan revisions require Department approval through the solid waste permit amendment procedure. Initial small changes to incorporate improvements learned during the implementation process may be approved by letter at the Department's discretion. Future revisions are expected to be incorporated in the plan through minor permit modifications.

4.1.2 Organization

- a. Interview facility supervision and discuss the current organization. The discussion should include changes to personnel identified in the action plan and authorities since the previous inspection compared to the current RPAP.

4.1.3 Scope of Program

- a. Verify the Action Plan used onsite is the same revision as the plan that was approved by the Department. Proceed with the inspection using the most recent approved plan on hand.
- b. All incoming waste received under the waste handling / disposal permit is required to be monitored.

4.1.4 Walk-Through Orientation Tour

- a. Perform a walk-through tour to observe general conditions of the vehicle radiation monitor, alarm location (i.e., near operational staff) and designated area.

- b. Measure dose rates and verify that background is less than 10 $\mu\text{R/hr}$ at the vehicle radiation monitor. If more than 10 $\mu\text{R/hr}$, verify shielding has been installed at the monitor to reduce background.

4.1.5 Facilities

- a. Verify that the facility layout conforms to that described in the map filed with the RPAP.
- b. Verify the designated area is located so it prevents unnecessary general public and staff radiation exposures. If radioactive material is stored for long periods (e.g., decay in storage), low-level radiation fields may cause exposures in excess of general public dose limits.

4.1.6 Management Oversight

- a. During the interviews, determine if management oversight is sufficient to provide the staff with adequate resources and authority to administer the program.
- b. Evaluate Health Physics support contractor involvement, and level of staff management interaction with the contractor.

4.1.7 Recordkeeping

- a. The facility is required to maintain records for input to the facilities annual report. Verify the facility has legible records that include the following for each instance of detected radioactive material.
 - Date, time and location of the occurrence
 - Narrative description of the occurrence commensurate with the event
 - Specific information on the origin of the material if known
 - Description of the radioactive material if known
 - Name, address and telephone number of the supplier, handler or transporter of the radioactive material and the name of the driver
 - The final disposition of the material (processed, disposed or rejected)
- b. Review the last annual report if available onsite.

4.1.8 Training

- a. Onsite staff training shall include:
 - Fundamentals of radiation safety
 - Operation of the monitoring instrumentation used at the facility
 - All aspects of the action plan
- b. Ask the staff to demonstrate their actions should an alarm occur.

4.1.9 Procedures

- a. Verify that written alarm procedures are posted where personnel monitoring the waste can utilize them.
- b. Verify posting of notices so that waste haulers know what to expect in the event of a radiation alarm.

4.2 General Technical Requirements

4.2.1 Equipment and Instrumentation

- a. Verify that the instrumentation used by the facility is appropriate for the intended use and conforms to the Action Plan. Verify equipment and instrumentation is operable, calibrated and adequately maintained.
 - Shall be calibrated annually
 - Portable instrumentation shall be source checked each day prior to use, source check may use a consumer item (e.g. gas mantle) with a known response
 - Installed instrumentation shall normally be source checked each day prior to use. Instruments utilizing a communications link with the manufacturer may be source checked on a weekly basis per manufacturers instructions

4.2.2 Required Notifications

- a. The facility is required to notify the Department for all Action Level Two alarms. The criteria for Action Level Two is provided below:
 - Dose rate ≥ 50 mrem/hr on the surface of the vehicle
 - Dose rate ≥ 2 mrem/hr in the cab of the vehicle
 - Contamination in excess of 22 dpm/cm² on the exterior of the vehicle when averaged over 300 cm². A wipe area of 600 cm² may be used if required for instrument sensitivity
- b. The facility is required to notify the Department for approval to process / dispose of all identified radioactive material that is outside of the limits of any blanket authorizations provided in the facility Action Plan.
- c. The facility is required to obtain a USDOT exemption from the Department prior to sending any vehicle with identified radioactive material on a public roadway. Spot check this against Department records.
- d. The facility is required to notify both the PA State Police and the Department if a vehicle leaves the site without an authorized DOT exemption. Note any such events.

4.2.3 Radiation Protection

- a. Facility staff exposure limits
 - The facility is encouraged to utilize "general public" exposure limits for the staff.
 - Some facility plans may use "occupational" exposure limits. Facilities that use these limits are not exempt from the ALARA concept and shall explain how they are minimizing personnel exposures. Facilities that use these limits are required to meet applicable requirements of 25 Pa. Code §§ 219 - 220. The methods that the facility will use to meet these requirements are provided in their Action Plan.
 - All facilities are required to show compliance with the exposure limits used. This can be done through the use of personnel dosimetry, time-motion studies or some other method described in the Action Plan.
- b. General public exposure limits

- Identified radioactive material in storage shall be controlled and posted to limit exposure of the staff and public.
- c. External Dosimetry
 - If used, verify that appropriate personnel wear personal dosimetry devices.
 - Verify that a National Voluntary Laboratory Accreditation Program accredited processor provides the dosimetry.

4.2.4 Waste Management

- a. Verify that any radiologically contamination solid waste processed or disposed, is in accordance with Department approvals. This approval may in the form of blanket approvals described in the Action Plan or in specific approvals provided by the Department.
 - Blanket approvals are provided for short-lived medical isotopes (<65 days) and less than aggregate quantities of consumer items.
 - Potassium or any related compound containing K-40, NORM from the undisturbed environment of the Commonwealth is not controlled by Department regulations and approval is not required for processing / disposal of this material.
- b. Specific approvals may be provided to the facility by letter and copied to the Regional Solid Waste Department and Area Health Physicist. These approvals are for disposal of a limited amount of material, and may not be identified in the Action Plan.
- c. Radioactive material controlled under a general or specific license or order authorized by any federal, state or other governmental agency may not be disposed or processed unless specifically exempted by the authorizing body. Examples of this type material are tritium exit signs and static eliminators.

4.2.5 Effluents

- a. The amount of patient-contaminated short-lived activity that can be incinerated without exceeding the annual air pathway public dose limit of 10 mrem is incorporated in the approved Action Plan of each Resource Recovery Facility that incinerates solid waste. The facility is required to track the amount and/or number of times radioactive material is processed. This is to verify that air pathway dose limits are not exceeded. Verify these facilities are tracking the amount of radioactive material incinerated.

4.3 Exit Meeting

- 4.3.1 The inspector shall conduct an exit meeting with a management representative to discuss preliminary inspection findings. This includes any apparent violations, radiation safety concerns and any items that were observed during the inspection. Also, note any good practices.

4.4 Post-Inspection Actions

- 4.4.1 After the inspection, the inspector will summarize the findings on the RPAP Solid Waste Facility Inspection Form (attached) and discuss the results with his/her

supervisor. This is especially important if there are controversial issues arising from the findings.

- 4.4.2 The inspector will ensure that inspection results are clearly communicated to the DEP Regional BLRWM inspector for documentation in ant official communications with the facility. The appropriate Regional BLRWM staff will take the lead on documentation and follow-up actions for all inspections of solid waste disposal/handling facilities.

Radiation Protection Action Plan Solid Waste Facility Inspection Form

Facility: _____ **Date:** _____
Inspector: _____ **Region:** _____

Mailing Address Line 1: _____
Mailing Address Line 2: _____
eFACTS Client No: _____

Site Address Line 1: _____
Site Address Line 2: _____
EFACTS Site No: _____
Telephone No: _____ **Fax No:** _____

Facility Contact: _____ **Phone No:** _____
Staff Interviewed: _____

ADMINISTRATIVE REQUIREMENTS

| | | | |
|---|---|-----|---|
| Y | N | | Is the Action Plan current? |
| Y | N | N/A | If the Action Plan was revised, has the Department concurred with the revision? |
| Y | N | | Are personnel who are named in the Action Plan still working in the same capacity as described in the Action Plan? If no, describe changes. |
| Y | N | | Do observations support all incoming waste received under the solid waste permit is monitored for radiation? |
| Y | N | | Is measured background less than or equal to 10 μ R/hr at the monitor? Measured _____ μ R /hr |
| Y | N | | Does radiation monitoring equipment and designated area match the Action Plan? |
| Y | N | | Do onsite staff implement the Action Plan? |
| Y | N | | Does the facility depend on HP contractors to implement any part of the Action Plan? |
| Y | N | | Are required records maintained? |
| Y | N | | Is required staff training provided? |

| | | | |
|---|---|--|--|
| Y | N | | Are procedures/notices posted as required? |
|---|---|--|--|

GENERAL TECHNICAL REQUIREMENTS

Equipment and Instrumentation

| | | | |
|---|---|--|--|
| Y | N | | Proper survey meters, normally required to measure 10 μ R/hr to >50 mR/hr and ability to detect beta/gamma contamination in accordance with their Action Plan. |
| Y | N | | Are meters calibrated annually? Last calibration date _____ |
| Y | N | | Are meters source checked per RPAP, normally daily or before each use, whichever is less? Portal monitors shall be checked per the RPAP |

Specific Notifications:

| | | | |
|---|---|--|---|
| Y | N | | Has the facility notified the Department for all Action Level Two alarms? |
| Y | N | | Has the facility requested authorization for approval to process any identified radioactive material that is not authorized by a blanket authorization? If yes, describe. |
| Y | N | | Does the facility request a DOT exemption for all loads sent back on the public highway? |
| Y | N | | Does the facility notify the PA State Police and the Department if a vehicle leaves without proper authorization? Describe: |

Radiation Protection

| | | | |
|---|---|-----|---|
| | | | Does the facility use (public dose limits) or (occupational dose limits)? |
| Y | N | N/A | If using occupational dose limits, does the facility meet applicable requirements of 25 Pa. Code §§ 219 – 220 as identified in the Action Plan? |
| Y | N | N/A | Does the facility use personnel dosimetry / time motion studies to verify personnel dose? |
| Y | N | | Does the facility isolate identified radioactive material while stored or staged? Describe: |
| Y | N | N/A | If personnel dosimetry is used, is it NVLAP accredited and worn properly? |

Waste Management

| | | | |
|---|---|--|---|
| Y | N | | Is there any indication the facility is disposing or processing radioactive material controlled under a specific or general license or order unless specifically exempted from disposal restrictions by applicable Pennsylvania or Federal statute or regulation. |
|---|---|--|---|

**GUIDE TO THE
PENNSYLVANIA
PUBLIC OFFICIAL
AND EMPLOYEE
ETHICS ACT**



STATE ETHICS COMMISSION

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Harrisburg, PA
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INTRODUCTION

Pennsylvania's first Public Official and Employee Ethics Act (the "Ethics Act"), was Act 170 of 1978, 65 P.S. Section 401 *et seq.*, which primarily became effective January 1, 1979. That Act was reenacted and amended effective June 26, 1989, by Act 9 of 1989. Then, on October 15, 1998, the current Ethics Act, Act 93 of 1998, Chapter 11, 65 Pa.C.S. § 1101 *et seq.*, was signed into law. It replaced the prior Ethics Acts and became effective December 14, 1998. The Ethics Act provides that public office is a public trust and that any effort to realize personal financial gain through public office is a violation of that trust. The Ethics Act was passed to strengthen the faith and confidence of the people of Pennsylvania in their government. The Pennsylvania State Ethics Commission administers and enforces the provisions of the Ethics Act and provides guidance regarding its requirements.

COMMISSION COMPOSITION

The Ethics Act provides that the State Ethics Commission shall be comprised of seven members who are cognizant of the responsibilities and burdens of public service. Three Commission members are appointed by the Governor, only two of whom may be of the same political party. One member is appointed by each of the following: the President Pro Tempore of the Senate, the Minority Leader of the Senate, the Speaker of the House, and the Minority Leader of the House. All members are appointed without confirmation. Commission members are eligible to serve two full three-year terms.

COMMISSION MEMBER AND EMPLOYEE RESTRICTIONS

Commission members and employees may not hold or campaign for any other public office, hold office in any political party or political committee, actively participate in or contribute to any political campaign, attempt to influence any decision by a governmental body except a court or as a representative of the Commission, or be employed by the Commonwealth or a political subdivision in any other capacity. Additionally, Commission members may not have served as an officer in a political party for one year prior to appointment.

COMMISSION POWERS AND DUTIES

- Render prospective advisory opinions to any person, or his appointing authority or employer, regarding such individual's duties and responsibilities under the Ethics Act.
- Receive and review Statements of Financial Interests of persons required to file, and inspect such statements to ascertain whether any reporting person has failed to file such statement or has filed a deficient statement.
- Prescribe forms for filing.
- Accept and file information voluntarily supplied that exceeds the requirements of the Act.
- Preserve statements and reports filed with the Commission for a period of five years.
- Make statements available for public inspection and copying.
- Maintain a master index of statements filed with the Commission.
- Instruct other state and local agencies in the maintenance of systems which facilitate public access to such statements.
- Investigate alleged violations of the Ethics Act and issue decisions in relation to said investigations.
- Prepare and publish an annual report, as well as special reports, educational materials, and technical studies to further the purposes of the Act.
- Hold hearings, take testimony, issue subpoenas and compel the attendance of witnesses.
- Prescribe rules and regulations to implement the provisions of the Ethics Act. (See 51 Pa. Code §11.1 *et seq.*)
- Hold at least two public hearings each year to seek input from persons and organizations which represent individuals subject to the Ethics Act and from other interested parties.

PUBLIC OFFICIALS/PUBLIC EMPLOYEES

The Ethics Act applies generally to public officials and public employees. Candidates and nominees for public office or employment are also subject to certain provisions in the Ethics Act. The Ethics Act defines each of the affected categories:

- A. "Public Official." Any person elected by the public or elected or appointed by a governmental body or an appointed official in the executive, legislative or judicial branch of this Commonwealth or any political subdivision thereof, provided that it shall not include members of advisory boards that have no authority to expend public funds other than reimbursement for personal expense or to otherwise exercise the power of this Commonwealth or any political subdivision thereof.
- B. "Public employee." Any individual employed by the Commonwealth or a political subdivision who is responsible for taking or recommending official action of a nonministerial nature with regard to:
 - (1) contracting or procurement;
 - (2) administering or monitoring grants or subsidies;
 - (3) planning or zoning;
 - (4) inspecting, licensing, regulating or auditing any person; or
 - (5) any other activity where the official action has an economic impact of greater than a de minimis nature on the interests of any person.

The term shall not include individuals who are employed by this Commonwealth or any political subdivision thereof in teaching as distinguished from administrative duties.

- C. "Candidate." Any individual who seeks nomination or election to public office by vote of the electorate, other than a judge of elections, inspector of elections or official of a political party, whether or not such individual is nominated or elected. An individual shall be deemed to be seeking nomination or election to such office if he has:
 - (1) received a contribution or made an expenditure or given his consent for any other person or

committee to receive a contribution or make an expenditure for the purpose of influencing his nomination or election to such office, whether or not the individual has announced the specific office for which he will seek nomination or election at the time the contribution is received or the expenditure is made; or

- (2) taken the action necessary under the laws of this Commonwealth to qualify himself for nomination or election to such office.

The term shall include individuals nominated or elected as write-in candidates unless they resign such nomination or elected office within 30 days of having been nominated or elected.

- D. "Nominee." Any person whose name has been submitted to a public official or governmental body vested with the power to finally confirm or reject proposed appointments to public office or employment.

Refer to the Pennsylvania Code, Title 51 for more information.

FILING A STATEMENT OF FINANCIAL INTERESTS

1. **Who must file:** The Public Official and Employee Ethics Act requires public officials, public employees, candidates, and nominees (*see*, definitions, above) to file statements of financial interests.

Persons who serve as full or part-time solicitors are required to file Statements of Financial Interests.

2. **Where to File:** Employees of the Commonwealth file ONLY with their respective agency, department or bureau personnel office.

Employees of county and local political subdivisions file ONLY with the governing authority of their political subdivision.

Incumbent county and local public officials (who are NOT candidates) including authority members file ONLY with the governing authority of their political subdivision.

Incumbent Commonwealth **Executive Branch public officials and appointed members of boards and**

commissions (Executive Branch) file with the State Ethics Commission, with the Governor's Office, and with the Department, Agency, Board or Commission to which they are appointed or elected.

Incumbent Commonwealth **Legislative Branch public officials** file with the State Ethics Commission and with the Chief Clerk of the House of Representatives or the Secretary of the Senate, whichever applies.

Incumbent Commonwealth public officials of **independent state agencies** file with the State Ethics Commission AND with the agency with which they are associated.

Other public officials file with the State Ethics Commission and their agency; other public employees file only with their agency.

Gubernatorial and state-level nominees file with the State Ethics Commission and with the Senate Caucus Secretary in charge of Executive Nominations.

County and local-level nominees file with the governing authority of the political subdivision and, if different, with the official or body vested with the power of confirmation.

Candidates for a state-level public office file with the State Ethics Commission and append a copy to the petition to appear on the ballot.

Candidates for county or local-level public office file with the governing authority of the political subdivision in which they are a candidate AND append a copy to the petition to appear on the ballot.

Write-in candidates (including winners) not seeking office through the nomination petition process shall file ONLY with the State Ethics Commission for state-level office and ONLY with the governing authority of the political subdivision for county or local-level office.

3. **When to File:** Public employees and public officials, who are not candidates — **by NO later than May 1** of each year a position is held and of the **year after leaving** a position.

Officials appointed after May 1 file by the following May 1, unless they have been appointed through a

nomination/confirmation process in which case they must file no later than 10 days before confirmation.

Gubernatorial nominees file NO LATER THAN 10 days before confirmation.

Candidates file on or before the last day for filing a petition to appear on the ballot for election.

Write-in winners of nominations or elections shall file within 30 days of having been nominated or elected unless such person resigns such nomination or elected office within that period of time. The 30-day period commences on the date the appropriate board of elections certifies the individual as the winner of the nomination/election.

NOTE: Only one (1) Statement of Financial Interests is required for each year. If multiple positions are held, all such positions may be listed on the same form. A copy of the form must be filed at all of the filing locations that are required for each of the positions sought/held.

4. **What to File:** Filers are required to disclose financial information concerning the prior calendar year. No dollar amounts are required for any of these items except for gifts and certain reportable expense payments/reimbursements.

The information to be disclosed pertains only to the filer and includes:

- The name, address (work or residence), and the public position(s) sought/held by the person filing.
- The occupation or profession of the filer.
- Real estate interests in which the Commonwealth or a political subdivision is involved.
- **Creditors:** the name and address of the creditor and the *interest rate* for each debt in excess of \$6,500. Debts secured by the principal or secondary residence of the filer and loans extended between members of the immediate family need not be listed.
- **Sources of income:** the name and address of each *source of income* totaling \$1,300 or more. Include the governmental body(ies) served, employers, and all other sources of income

(gross income) meeting the applicable disclosure threshold. Include any payment, fee, salary, expense, allowance, forbearance, forgiveness, interest, dividend, royalty, rent, capital gain, reward, severance payment, prize winnings, and tax exempt income. DO NOT INCLUDE: gifts; governmentally mandated payments; or retirement, pension or annuity payments funded totally by contributions of the official/employee.

- **Gifts:** The names and addresses of the sources, the values, and the circumstances surrounding gift(s) of \$250 or more in the aggregate. Gifts from family members and certain friends are exempt. (A gift is defined as anything that is received without consideration of equal or greater value, excluding political contribution(s) otherwise reported as required by law or commercially reasonable loan(s) made in the ordinary course of business).
- **Paid/Reimbursed Expenses:** The name and address of the source and the amount of each payment/reimbursement for transportation, lodging or hospitality expenses received in connection with public office or employment where such actual expenses exceed \$650 in the course of a single occurrence. Such payments from a governmental body or associations of public officials/employees of political subdivisions in which such public officials/employees officially serve are exempt.
- Any office, directorship or employment of any nature whatsoever in any business.
- Any financial interest in any legal entity engaged in business for profit. The term "financial interest," is defined as "[a]ny financial interest in a legal entity engaged in business for profit which comprises more than 5% of the equity of the business or more than 5% of the assets of the economic interest in indebtedness." 65 Pa.C.S. § 1102.
- Identity of any financial interest (*see* definition above) in a business which has been transferred to a member of the filer's immediate family

(parent, spouse, child, brother, sister) during the prior calendar year.

5. **Where to Obtain Forms:** The State Ethics Commission, 309 Finance Building, P.O. Box 11470, Harrisburg, PA 17108-1470; the County Boards of Elections; local political subdivisions; on-line at www.ethics.state.pa.us; and other sources announced at time of distribution of the forms.

6. **Penalty for Failure to File:** Any person who fails to file a Statement of Financial Interests as required by the Ethics Act may be found guilty of a misdemeanor and may be fined not more than \$1,000.00 or imprisoned for not more than one year or be both fined and imprisoned.

Failure by a candidate to file as required by the Ethics Act shall, in addition to other penalties, be a fatal defect to a petition to appear on the ballot.

No public official shall be allowed to take the oath of office, enter or continue upon his duties, or be compensated from public funds unless he has complied with the requirements of the Ethics Act for filing Statements of Financial Interests.

Any public official or employee who is required to file a statement and does not do so or who files a deficient statement may be penalized \$25 per day for each day said statement is delinquent or deficient up to \$250.

7. **Public Inspection of Statements of Financial Interests:** Statements of Financial Interests on file with the State Ethics Commission will be available for public inspection and copying between the hours of 8:00 A.M. and 5:00 P.M. Monday through Friday (excluding Legal Holidays). There is a charge of 25¢ per page for copies.

All statements must be made available for public inspection and copying at an amount not to exceed actual cost.

REQUESTING AN ADVICE/OPINION

The State Ethics Commission is authorized to issue prospective advisory opinions regarding the duties and responsibilities of persons who are subject to the Ethics Act.

1. **Who May Request an Advice/Opinion:** Any person subject to the Act may request an advice/opinion about his own obligations. An advice/opinion may also be requested by the authorized representative of such person or by the appointing authority or employer of such person.

2. **How Does One Request an Advice/Opinion:** Write to the State Ethics Commission and provide the following information.

(a) Name, address, and phone number of the person who is the subject of the request and if different, the name, address and phone number of the person initiating the request.

(b) The name of the governmental body with which the subject serves and the name or title of such person's public office or position.

(c) If the requestor is the appointing authority, employer, or representative of the subject of the request, delineate the nature of such relationship.

(d) The nature and duties of the subject's office or job. Include an organization chart, bylaws of the organization, if available, and a job description.

(e) List the relevant material facts and circumstances surrounding the request.

3. **How is the Request Processed:**

(a) The Commission will notify the requestor within 14 days as to whether an advice or opinion will be issued. An advice is issued by the Commission's Chief Counsel where Commission precedent, court cases, the Act or regulations provide a basis upon which to render such advice. An advice can usually be issued to a person within 21 working days of receipt of the request. In some cases, however, the Commission may extend the time. An advice may be appealed to the full Commission.

(b) In cases where there is no precedent, an opinion will be issued by the Commission members. Upon receipt of the request, the requestor and the subject, if different, will be advised of the date, time, and place of the Commission meeting. Said individuals may attend this meeting and make a presentation.

4. **Will the Advice or Opinion Be Public:** The final advice or opinion will be available to the public as an official Commission ruling. The person requesting the advice or opinion may, however, require that the ruling contain such deletions and changes as shall be necessary to protect the identity of the person involved.
5. **What Is the Effect of an Opinion or Advice:**
- (a) If you have requested an opinion and have acted in good faith on the opinion that was issued to you, you may not be subjected to criminal or civil penalties, provided you have truthfully disclosed all material facts.
 - (b) An advice of the Commission is a complete defense in any enforcement proceeding initiated by the Commission and is evidence of good faith conduct in any other civil or criminal proceeding if the advice was requested at least 21 working days prior to taking the action described in the request and the material facts are as stated in the request.

RESTRICTED ACTIVITIES

Section 1103 of the Public Official and Employee Ethics Act provides certain restricted activities in which public officials and employees may not engage. These restrictions provide the basis upon which many Commission rulings are issued.

Restricted Activities:

- (a) **Conflict of interest** — No public official or public employee shall engage in conduct that constitutes a conflict of interest. A conflict of interest is defined as use by a public official or public employee of the authority of his office or employment or any confidential information received through his holding public office or employment for the private pecuniary benefit of himself, a member of his immediate family, or a business with which he or a member of his immediate family is associated. "Conflict" or "conflict of interest" does not include an action having a de minimis economic impact or which

affects to the same degree a class consisting of the general public or a subclass consisting of an industry, occupation or other group which includes the public official or public employee, a member or his immediate family or a business with which he or a member of his immediate family is associated.

- (b) **Seeking improper influence** — No person shall offer or give to a public official, public employee or nominee or candidate for public office or a member of his immediate family or a business with which he is associated, anything of monetary value, including a gift, loan, political contribution, reward or promise of future employment based on the offeror's or donor's understanding that the vote, official action or judgment of the public official or public employee or nominee or candidate for public office would be influenced thereby.
- (c) **Accepting improper influence** — No public official, public employee or nominee or candidate for public office shall solicit or accept anything of monetary value, including a gift, loan, political contribution, reward, or promise of future employment based on any understanding of that public official, public employee or nominee that the vote, official action, or judgment of the public official or public employee or nominee or candidate for public office would be influenced thereby.
- (d) **Honorarium** — No public official or public employee shall accept an honorarium.
- (e) **Contingent and severance payments** —
 - (1) No person shall solicit or accept a severance payment or anything of monetary value contingent upon the assumption or acceptance of public office or employment.
 - (2) This subsection shall not prohibit:
 - (i) Payments received pursuant to an employment agreement in existence prior to the time a person becomes a candidate or is notified by a member of a transition team, a search committee or

a person with appointive power that he is under consideration for public office or makes application for public employment.

- (ii) Receipt of a salary, fees, severance payment or proceeds resulting from the sale of a person's interest in a corporation, professional corporation, partnership or other entity resulting from termination or withdrawal therefrom upon the assumption or acceptance of public office or employment.
- (3) Payments made or received pursuant to paragraph (2)(i) and (ii) shall not be based on the agreement, written or otherwise, that the vote or official action of the prospective public official or employee would be influenced thereby.
- (f) **Contract** — No public official or public employee or his spouse or child or any business in which the person or his spouse or child is associated shall enter into any contract valued at \$500 or more with the governmental body with which the public official or public employee is associated or any subcontract valued at \$500 or more with any person who has been awarded a contract with the governmental body with which the public official or public employee is associated, unless the contract has been awarded through an open and public process, including prior public notice and subsequent public disclosure of all proposals considered and contracts awarded. In such a case, the public official or public employee shall not have any supervisory or overall responsibility for the implementation or administration of the contract. Any contract or subcontract made in violation of Section 1103(f) of the Ethics Act shall be voidable by a court of competent jurisdiction if the suit is commenced within 90 days of the making of the contract or subcontract.
- (g) **Former official or employee** — No former public official or public employee shall represent a person, with promised or actual compensation,

on any matter before the governmental body with which he has been associated for one year after he leaves that body.

- (h) **Misuse of Statement of Financial Interests** — No person shall use for any commercial purpose information copied from Statements of Financial Interests required by the Ethics Act or from lists compiled from such statements.
- (i) **Former executive-level employee** — No former executive-level Commonwealth employee may for a period of two years from the time that he terminates employment with this Commonwealth be employed by, receive compensation from, assist or act in a representative capacity for a business or corporation that he actively participated in recruiting to this Commonwealth or that he actively participated in inducing to open a new plant, facility or branch in this Commonwealth or that he actively participated in inducing to expand an existent plant or facility within this Commonwealth, provided that the above prohibition shall be invoked only when the recruitment or inducement is accomplished by a grant or loan of money or a promise of a grant or loan of money from the Commonwealth to the business or corporation recruited or induced to expand.
- (j) **Voting conflict** — Where voting conflicts are not otherwise addressed by the Constitution of Pennsylvania or by any law, rule, regulation, order or ordinance, the following procedure shall be employed. Any public official or public employee who in the discharge of his official duties would be required to vote on a matter that would result in a conflict of interest shall abstain from voting and, prior to the vote being taken, publicly announce and disclose the nature of his interest as a public record in a written memorandum filed with the person responsible for recording the minutes of the meeting at which the vote is taken, provided that whenever a governing body would be unable to take any action on a matter before it because the number of members of the body required to abstain from voting under the provisions of this section

makes the majority or other legally required vote of approval unattainable, then such members shall be permitted to vote if disclosures are made as otherwise provided herein. In the case of a three-member governing body of a political subdivision, where one member has abstained from voting as a result of a conflict of interest, and the remaining two members of the governing body have cast opposing votes, the member who has abstained shall be permitted to vote to break the tie vote if disclosure is made as otherwise provided above.

FILING A COMPLAINT

1. **Who May File a Complaint:** Any individual may file a complaint concerning alleged violations of the Ethics Act.
2. **How Do I File a Complaint:** Complaint forms are available upon request from the Commission. The complaint should state the name, position or office held by the alleged violator, and a description of the facts that are alleged to constitute a violation. Complaints must be signed and sworn.
3. **What Constitutes a Violation of the Ethics Act:** A violation of the Ethics Act may be found where a person has failed to fulfill duties and responsibilities under the Ethics Act or has engaged in activities that are restricted/prohibited by the Ethics Act.
4. **What Can I Expect After a Complaint Is Filed:**
 - (a) The Commission will initially acknowledge receipt of a complaint.
 - (b) If the matter is not within the Commission's jurisdiction or if the complaint lacks sufficient information, it will not be processed and the complainant will be so notified.
 - (c) The Commission may initiate a preliminary inquiry or full investigation. A preliminary inquiry must be completed within 60 days and either be terminated or opened as a full investigation.
 - (d) The complainant will be notified within 72 hours of the commencement of a full investiga-

tion. Both the complainant and subject of the investigation will be notified of the status of the investigation every 90 days until it is complete.

- (e) The subject of an investigation must be notified prior to the initiation of such investigation of the allegations against said person.
 - (f) If after a preliminary inquiry the matter is terminated, both the complainant and subject of the inquiry will be notified. If the Commission determines that a complaint is frivolous, the Commission shall so state.
 - (g) If a full investigation has been conducted, upon the conclusion of the field investigation the subject of the complaint will be issued a Findings Report/Investigative Complaint containing the relevant findings of the Investigative Division. Such report must be issued within 360 days of the initiation of the full investigation. Any Answer to the Findings Report/Investigative Complaint must be filed so that it is received by the Commission within 30 days after the issuance of the Findings Report/Investigative Complaint.
 - (h) Upon issuance of the Findings Report/Investigative Complaint, the subject will be afforded a full and fair opportunity to challenge the findings and allegations. Such may include evidentiary hearings and arguments of law.
 - (i) Upon the conclusion of the proceedings, the Commission will issue a final order containing findings of fact and conclusions of act. Final orders issued by the Commission may be appealed to the Commonwealth Court of Pennsylvania.
5. **Will the Complaint Be Confidential:** All Commission proceedings and records relating to an investigation are confidential until a final determination is made by the Commission. The final order is a public record. All other file material remains confidential. The identity of a complainant, however, may be released by the Commission if it is determined that there has been a wrongful use of the Act (*see, infra*).
 6. **Are There Any Circumstances Under Which a Person May Disclose or Acknowledge the Existence**

of an Investigation: A person may disclose or acknowledge to another matters that are otherwise confidential when the matter pertains to:

- Final orders of the Commission;
- Commission public hearings;
- Seeking advice of legal counsel;
- Appealing a Commission order;
- Communicating with the Commission or its staff, in the course of a preliminary inquiry, investigation, hearing or petition for reconsideration by the Commission;
- Consulting with a law enforcement official or agency for the purpose of initiating, participating in or responding to an investigation or prosecution by the law enforcement official or agency;
- Testifying under oath before a governmental body or a similar body of the United States of America;
- Information, records or proceedings relating to a complaint, preliminary inquiry, investigation, hearing or petition for reconsideration that the person is the subject of;
- The publication or broadcast of information legally obtained by the news media regarding a confidential Commission proceeding;
- The divulgence by individuals who are interviewees or witnesses as to confidential Commission proceedings regarding information that was already in their possession or the disclosure of their own statements; or such other exceptions as the Commission, by regulation, may direct.

7. **Are There Any Protections for a Complainant or Witness:** No public official or public employee shall discharge any official or employee or change his official rank, grade or compensation, or deny him a promotion, or threaten to do so, for filing a complaint with or providing information to the Commission or testifying in any Commission proceeding. Any person who engages in such retaliatory activity is guilty of a misdemeanor and, in addition to any

other penalty provided by law, shall be fined not more than \$1,000 or imprisoned for not more than one year, or be both fined and imprisoned.

8. **What Is a Wrongful Use of Act:** A complainant may be found to have wrongfully used the Act if:
- The complaint was frivolous (filed in a grossly negligent manner without basis in law or fact) or without probable cause and made primarily for a purpose other than that of reporting a violation of the Ethics Act; or
 - The complainant publicly disclosed or caused to be disclosed that a complaint against a person had been filed with the Commission.
- A person who signs a complaint alleging a violation of the Ethics Act has probable cause for doing so if he reasonably believes in the existence of the facts upon which the claim is based and either:
- (1) Reasonably believes that under those facts the complaint may be valid under the Ethics Act, or
 - (2) Believes to this effect in reliance upon the advice of counsel, sought in good faith and given after full disclosure of all relevant facts within his knowledge and information.

9. **Does a Wrongfully Accused Public Official Have Any Recourse:** If a public official or public employee has reason to believe a complaint was frivolous, or was without probable cause and made primarily for a purpose other than reporting a violation of the Ethics Act, or was publicly disclosed (a wrongful use of act), such public official/public employee may request that the Commission investigate said matter.

If the Commission determines that there has been a wrongful use of act, the identity of the complainant may, upon request of the subject, be released.

If it has been determined that there has been a wrongful use of the act, the subject may bring an action to recover for the following:

- (1) The harm to his reputation by a defamatory matter alleged as the basis of the proceeding.
- (2) The expenses, including any reasonable attorney

fees, that he has reasonably incurred in proceedings before the Commission.

- (3) Any specific pecuniary loss that has resulted from the proceedings.
- (4) Any emotional distress that has been caused by the proceedings.
- (5) Any punitive damages according to law in appropriate cases.

As noted below, the Ethics Act also provides criminal penalties for violation of the confidentiality of a Commission proceeding.

10. What Are the Penalties for Violating the Act:

Violations of Sections 1103(a), (b) and (c) are felonies and can result in a fine of not more than \$10,000 and/or imprisonment for not more than five years. Violations of sections 1103(d) through (j), 1104, and 1105(a) are misdemeanors and can result in a fine of not more than \$1,000 and/or imprisonment for not more than one year.

Any person who obtains financial gain from violating any provision of the Ethics Act can, in addition to any other penalty provided by law, be ordered to pay three times the financial gain into the State Treasury or the treasury of the political subdivision.

Any person who obtains a financial gain in violation of the Ethics Act may in addition to the above penalties, be required to pay restitution plus interest to the appropriate governmental body.

Any person who violates the confidentiality of a Commission proceeding pursuant to Section 1108 is guilty of a misdemeanor and may be fined not more than \$1,000 and/or imprisoned for not more than one year.

Any person who willfully affirms or swears falsely in regard to any material matter before a Commission proceeding pursuant to Section 1108 is guilty of a felony and may be fined not more than \$5,000 and/or imprisoned for not more than five years.

In addition to any other civil remedy or criminal penalty provided for in the Act, failure to timely file a Statement of Financial Interests or filing of a deficient statement may result in a penalty of \$25 per day up to \$250.

NOTE: A public official of a political subdivision who acts in good faith reliance on a written, non-confidential opinion of the political subdivision's solicitor, or upon such solicitor's opinion publicly stated at an open meeting of the political subdivision and recorded in the official meeting minutes, shall not be subject to certain of the criminal penalties or the treble damage penalties of the Act.

REGULATIONS: The Regulations of the State Ethics Commission set forth the procedures applicable to all proceedings before the Commission as well as for the administration of the Statement of Financial Interests filing requirements. See 51 Pa. Code § 11.1 *et seq.*

MISCELLANEOUS INFORMATION

Additional information is available from the State Ethics Commission including:

- Consolidated Rulings Digest
- Annual Report
- Commission Decisions
- Quarterly Newsletter

ETHICS ON THE INTERNET

An on-line "e-Library" of all Commission Rulings is included in the Commission's website found at www.ethics.state.pa.us. This system provides state-of-the-art research and retrieval of thousands of Commission documents dating back to the Commission's inception in 1979. This initiative involved the scanning and indexing of thousands of documents which were subsequently posted to the Commission's website. Commission rulings will be added to the on-line library as they are issued. Interested parties can log onto the Commission's website and click on the convenient link which takes them to the e-Library and type in a name, topic, or date, etc., and the software does the retrieval work in just seconds. Once the keyword is located, the user can easily scan through all of the documents to find the exact information they are looking for as search words are highlighted to show their exact location within a given document. They can then save the image to a file for future reference, print it out in

hard-copy form, copy it to a CD, or even send it to another party via e-mail. Users will also find within the *e*-Library a helpful Search Guide and instructions for performing more advanced or complex searches.

Copies of the Commission's Annual Report and Quarterly Newsletters are also found on the website.