THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 496

Session of 2007

INTRODUCED BY GEORGE, MELIO, BENNINGTON, CALTAGIRONE, DeLUCA, DePASQUALE, FABRIZIO, FRANKEL, FREEMAN, HENNESSEY, JOSEPHS, MANN, MOYER, M. O'BRIEN, PETRONE, PYLE, READSHAW, RUBLEY, STABACK, J. TAYLOR, WALKO, WHEATLEY, YUDICHAK, BASTIAN, JAMES AND SIPTROTH, FEBRUARY 26, 2007

AS REPORTED FROM COMMITTEE ON ENVIRONMENTAL RESOURCES AND ENERGY, HOUSE OF REPRESENTATIVES, AS AMENDED, APRIL 25, 2007

AN ACT

- Amending the act of July 10, 1984 (P.L.688, No.147), entitled 2 "An act combining the radiation safety provisions of The Atomic Energy Development and Radiation Control Act and the 3 4 Environmental Radiation Protection Act; empowering the 5 Department of Environmental Resources to implement a 6 comprehensive Statewide radiation protection program; further 7 providing for the power of the Environmental Quality Board and for the duties of the Environmental Hearing Board; 8 9 expanding the authority of the department to regulate other 10 radiation sources; providing for radiation emergency response; establishing requirements for transport of spent 11 12 reactor fuel; establishing fees; providing penalties; making 13 repeals; and authorizing and directing the Department of Environmental Resources and the Governor to convey ownership 14 to the Carl A. White Acid Mine Drainage Treatment Plant, 15 16 situated in Washington Township, Indiana County, 17 Pennsylvania, to the County of Indiana, subject to a right of reverter for stated conditions," further providing for 18 19 definitions, for powers of Environmental Quality Board, for 20 nuclear facility and transport fees, for creation of special funds, for response program and for transportation of 21 radioactive materials; and making repeals. 22
- 23 The General Assembly of the Commonwealth of Pennsylvania
- 24 hereby enacts as follows:
- 25 Section 1. Sections 103 and 302 of the act of July 10, 1984
- 26 (P.L.688, No.147), known as the Radiation Protection Act, are

- 1 amended to read:
- 2 Section 103. Definitions.
- 3 The following words and phrases when used in this act shall
- 4 have the meanings given to them in this section unless the
- 5 context clearly indicates otherwise:
- 6 "Abatement." Any action deemed necessary by the department
- 7 to protect public health, safety or welfare, or public or
- 8 private property, resulting from the use of a radiation source.
- 9 "Agency." The Pennsylvania Emergency Management Agency.
- 10 <u>"Away-from-reactor spent nuclear fuel storage facility." A</u>
- 11 spent nuclear fuel storage facility located outside the site
- 12 boundaries or property lines of a nuclear power reactor licensed
- 13 under 10 CFR Pt. 50 (relating to domestic licensing of
- 14 production and utilization facilities).
- 15 "Council." The Pennsylvania Emergency Management Council.
- 16 "Department." The Department of Environmental [Resources]
- 17 <u>Protection</u> and its authorized representatives.
- 18 "Director." The Director of the Pennsylvania Emergency
- 19 Management Agency.
- 20 "Electronic product radiation." Any radiation emitted by
- 21 products subject to the Radiation Control for Health and Safety
- 22 Act of 1968 (Public Law 90-602, 82 Stat. 1173).
- 23 "High-level waste."
- 24 (1) Irradiated reactor fuel;
- 25 (2) highly-radioactive material resulting from the
- 26 <u>reprocessing of spent nuclear fuel, including liquid waste</u>
- 27 produced directly in reprocessing and any solid material
- 28 <u>derived from such liquid waste that contains fission products</u>
- in sufficient concentrations; or
- 30 (3) other highly radioactive material that the Nuclear

- 1 Regulatory Commission, consistent with existing Federal law,
- determines by rule requires permanent isolation.
- 3 <u>"Large quantity of radioactive material." A single package</u>
- 4 <u>or multiple packages in a single shipment of radioactive</u>
- 5 material which exceed any of the following limits:
- 6 (1) 1,000 Terabecquerels (TBq) (27,000 curies (Ci));
- 7 (2) 3,000 times the A sub1 or A sub2 limits for a
- 8 radionuclide listed in Appendix A of 10 CFR Pt. 71 (relating
- 9 <u>to packaging and transportation of radioactive material);</u>
- 10 (3) a radioactive material quantity of concern as
- defined by the Nuclear Regulatory Commission; or
- 12 (4) any radioactive material shipment where State
- 13 <u>notification is mandated by Federal law, regulation, order or</u>
- other Federal requirement.
- 15 "NRC." The United States Nuclear Regulatory Commission or
- 16 any predecessor or successor thereto.
- 17 "Person." An individual, corporation, firm, association,
- 18 public utility, trust, estate, public or private institution,
- 19 group, agency, political subdivision of the Commonwealth, any
- 20 other state or political subdivision or agency thereof and any
- 21 legal successor, representative, agent or agency of the
- 22 foregoing, other than the United States Nuclear Regulatory
- 23 Commission or any successor thereto. In any provision of this
- 24 act prescribing a fine, imprisonment or penalty, or any
- 25 combination of the foregoing, the term "person" shall include
- 26 the officers and directors of any corporation or other legal
- 27 entity having officers and directors.
- 28 ["PSP." The Pennsylvania State Police.]
- 29 "Radiation." Any ionizing radiation or electronic product
- 30 radiation.

- 1 "Radiation source." An apparatus or material, other than a
- 2 nuclear power reactor and nuclear fuel located on a plant site,
- 3 emitting or capable of emitting radiation.
- 4 "Radiation source user." A person who owns or is responsible
- 5 for a radiation source.
- 6 <u>"Reactor fuel fabrication facility." A facility in which</u>
- 7 onsite operations include preparation of reactor fuel material
- 8 with fissionable material such as uranium or plutonium, reactor
- 9 <u>fuel material research and development, formation of fuel</u>
- 10 material shapes, application of cladding, recovery of reactor
- 11 <u>fuel material or any other reactor fuel material manufacturing</u>
- 12 operation.
- "Secretary." The Secretary of Environmental [Resources]
- 14 Protection or his or her authorized representative.
- 15 "Spent nuclear fuel." Fuel that has been withdrawn from a
- 16 nuclear reactor following irradiation, the constituent elements
- 17 of which have not been separated by reprocessing.
- 18 "Transuranic waste." Radioactive waste containing more than
- 19 3.7 kilobecquerels (KBq) (100 nanocuries) of alpha-emitting
- 20 <u>transuranic isotopes per gram of waste, with half-lives greater</u>
- 21 than 20 years, except for high-level waste.
- 22 Section 302. Powers of Environmental Quality Board.
- 23 (a) Powers and duties. -- The Environmental Quality Board or
- 24 its successor shall have the power and its duty shall be to
- 25 adopt the rules and regulations of the department to accomplish
- 26 the purposes and carry out the provisions of this act.
- 27 (b) Review of department fee structure.--The Environmental
- 28 Quality Board or its successor shall review every [four] three
- 29 years the fee structure as authorized by [sections 401 and
- 30 402(b) | section 401.

- 1 Section 2. Section 402 of the act, repealed in part December
- 2 18, 1992 (P.L.1638, No.180), is amended to read:
- 3 Section 402. Nuclear facility and transport fees.
- 4 (a) General rule. -- Persons engaged in the business of
- 5 producing electricity utilizing nuclear energy, operating
- 6 facilities for storing away-from-reactor spent nuclear fuel [for
- 7 others] or fabrication of nuclear <u>reactor</u> fuel or shipping spent
- 8 nuclear fuel, high-level waste, transuranic waste or a large
- 9 <u>quantity of radioactive material</u> shall pay fees to cover the
- 10 costs of the programs related to their activities as required by
- 11 this act.
- 12 (b.1) Department fees.--
- 13 (1) Within 30 days of the effective date of this
- subsection each person who has a current nuclear power
- 15 <u>reactor construction permit or operating license from the NRC</u>
- for a site within this Commonwealth shall pay the department
- 17 \$100,000 per nuclear power reactor site, regardless of the
- 18 number of individual nuclear power reactors located at the
- 19 site. By July 1, 2008 2007, and July 1 of each year
- 20 <u>thereafter, each person who has a current nuclear power</u>
- 21 reactor construction permit or operating license from the NRC
- for a site within this Commonwealth shall pay the department
- an annual fee of \$550,000 per nuclear power reactor site,
- 24 <u>regardless of the number of individual nuclear power reactors</u>
- 25 <u>located at the site. For the purposes of this subsection</u>
- 26 only, a nuclear power reactor site shall be deemed to be the
- 27 location of one or more individual nuclear power reactors
- 28 which still has spent nuclear fuel stored onsite, has not
- been fully dismantled and decommissioned pursuant to
- 30 applicable Federal law and regulations, and has not been

- 1 granted license termination by the NRC.
- 2 (2) By July 1 of each year, each person who has applied
- 3 for or currently holds a valid license from the NRC to
- 4 <u>operate an away-from-reactor spent nuclear fuel storage</u>
- 5 <u>facility within this Commonwealth shall pay to the department</u>
- 6 an annual fee of \$250,000 per site.
- 7 (3) By July 1 of each year, each person who has approval
- from the Department of Energy, or has applied for or
- 9 <u>currently holds a valid license from the NRC, to operate a</u>
- 10 reactor fuel fabrication facility within this Commonwealth
- shall pay to the department an annual fee of \$250,000 per
- 12 site.
- 13 (4) Prior to the date of a shipment that requires an
- 14 escort, each shipper of spent nuclear fuel, high-level waste,
- transuranic waste or a large quantity of radioactive material
- who ships to, within, through or across this Commonwealth
- 17 shall pay to the department a fee of \$500 per individual
- 18 vehicle shipment or \$1,000 per railroad or river barge
- 19 shipment.
- 20 (5) Every three years beginning in 2009, the department
- 21 shall convene a working group consisting of personnel from
- the department selected by the secretary and an equal number
- of representatives from the nuclear facilities, selected by
- 24 <u>the owners of those facilities, to review the nuclear</u>
- 25 <u>facility fees paid to the department, related issues that may</u>
- 26 <u>have an impact on those fees and the expenditures made by the</u>
- 27 <u>department in administering its radiation protection</u>
- programs. This working group shall issue a report to the
- 29 General Assembly outlining its findings of fact and its
- 30 <u>recommendations relative to the fees imposed by the</u>

- department pursuant to this section, including any individual
- 2 or minority recommendations from members of the working
- 3 group.
- 4 (b.2) Actual department cost recovery. -- The following
- 5 <u>individual nuclear power reactors shall be subject to actual</u>
- 6 <u>department cost recovery for decommissioning oversight</u>
- 7 responsibilities, with these costs to be tracked by site and
- 8 invoiced to the person holding the NRC reactor license at the
- 9 <u>end of each Commonwealth fiscal quarter:</u>
- 10 (1) Peach Bottom Atomic Power Station, Unit 1.
- 11 (2) Three Mile Island Nuclear Generating Station, Unit
- 12 <u>2.</u>
- 13 The two individual nuclear power reactors specified in this
- 14 <u>subsection</u> are not <u>subject</u> to the fees described in <u>subsections</u>
- 15 (b.1)(1) and (c)(1.1).
- 16 (c) Agency fees.--
- 17 [(1) Each person who has received or has applied for a
- 18 nuclear power reactor facility operating license from the NRC
- 19 shall pay to the agency a one-time fee of \$200,000 per site
- within 30 days of the effective date of this act and an
- annual fee of \$100,000 per site payable by July 1 of each
- year, regardless of the number of power reactors per site.]
- 23 (1.1) (i) Within 30 days of the effective date of this
- 24 <u>paragraph each person who has a current nuclear power</u>
- 25 <u>reactor construction permit or operating license from the</u>
- 26 NRC, for a site within this Commonwealth, shall pay the
- 27 agency, regardless of the number of individual nuclear
- 28 power reactors located at the site, \$100,000 to be
- 29 collected and used by the agency in accordance with the
- 30 provisions of 35 Pa.C.S. § 7320 (relating to radiological

1 emergency response preparedness, planning and recovery program) and \$50,000 to be collected and used by the 2 3 agency for radiological emergency response equipment, 4 planning, training and exercise costs involving nonagency 5 personnel. By July 1, 2008 2007, and July 1 of each year thereafter, each person who has a current nuclear power 6 reactor construction permit or operating license from the 7 NRC, for a site within this Commonwealth, shall pay the 8 agency the following fees, regardless of the number of 9 10 individual nuclear power reactors located at the site: 11 (A) \$200,000 to be collected and used by the 12 agency in accordance with the provisions of 35 Pa.C.S. § 7320. 13 (B) \$150,000 to be collected and used by the 14 15 agency for radiological emergency response equipment, 16 planning, training and exercise costs involving 17 nonagency personnel. 18 (ii) Payments collected under this section shall be deposited into the <u>Radiological Emergency Response</u> 19 20 Planning and Preparedness Program Fund established pursuant to 35 Pa.C.S. § 7320(c). For the purposes of 21 22 this subsection only, a nuclear power reactor site shall 23 be deemed to be the location of one or more individual 24 nuclear power reactors which still has spent nuclear fuel 25 stored onsite, has not been fully dismantled and 26 decommissioned pursuant to applicable Federal law and 27 regulations and has not been granted license termination 28 by the NRC. [Each] By July 1 of each year, each person who has

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applied for or [received a valid] holds a current license

- 1 from the NRC to operate an away-from-reactor spent nuclear
- fuel storage facility within this Commonwealth shall pay to
- 3 the agency an annual fee of [\$50,000 per site payable by July
- 4 1 of each year] <u>\$75,000 per site</u>.
- 5 (3) [Each] By July 1 of each year, each person who has
- 6 <u>approval from the Department of Energy, or has</u> applied for or
- 7 [received a valid] holds a current license from the NRC to
- 8 operate a reactor fuel fabrication facility within this
- 9 Commonwealth shall pay to the agency an annual fee of
- 10 [\$50,000 per site payable by July 1 of each year] <u>\$75,000 per</u>
- 11 <u>site</u>.
- 12 (4) [Each] Prior to the proposed date of a shipment that
- requires an escort, each shipper of spent [reactor fuel]
- 14 nuclear fuel, high-level waste, transuranic waste or a large
- 15 <u>quantity of radioactive material who ships</u> to, within,
- through or across the boundaries of this Commonwealth shall
- 17 pay to the agency a fee of [\$1,000 per shipment, payable
- prior to the proposed date of shipment.] \$2,500 per
- 19 individual vehicle shipment or \$4,500 per railroad car or
- 20 river barge shipment.
- 21 (5) Every three years beginning in 2011 2009, the agency
- 22 shall convene a working group consisting of personnel from
- 23 the agency selected by the director and an equal number of
- representatives from the nuclear facilities, selected by the
- 25 owners of those facilities, to review the nuclear facility
- 26 <u>fees paid to the agency, related issues that may have an</u>
- 27 impact on those fees and the expenditures made by the agency
- in administering its radiation protection programs. This
- 29 working group shall issue a report to the General Assembly
- 30 outlining its findings of fact and its recommendations

- 1 relative to the fees imposed by the agency pursuant to this
- 2 <u>section</u>, including any individual or minority recommendations
- 3 <u>from members of the working group.</u>
- 4 (d) [PSP] <u>Pennsylvania State Police</u> fees.--
- 5 (1) Each shipper of spent [reactor fuel] <u>nuclear fuel</u>,
- 6 <u>high-level waste, transuranic waste or a large quantity of</u>
- 7 <u>radioactive material who ships</u> to, within, through or across
- 8 the Commonwealth shall reimburse the [PSP] Pennsylvania State
- 9 <u>Police</u> for <u>the actual costs</u>, as determined by the
- 10 <u>Pennsylvania State Police, to provide</u> escort service. [at the
- 11 following rates: \$20 per hour per officer and 50ç per mile
- for highway shipments. Rail shipments shall be based on a
- rate of \$25 per hour per officer.] If the shipment is
- canceled following [PSP] notification for escort service, the
- shipper shall compensate the [PSP] <u>Pennsylvania State Police</u>
- at an appropriate rate for [four] total hours of officers'
- 17 time.
- 18 (2) [The PSP may adjust the rates by regulation as
- 19 prevailing wage rates and transportation costs change.] <u>The</u>
- 20 Pennsylvania State Police may establish a schedule of fees
- 21 <u>for escort, and revise such fees on an annual basis. Such</u>
- fees shall be published in the Pennsylvania Bulletin.
- 23 (e) Penalties.--Any person violating any provision of this
- 24 chapter shall be subject to the penalties and enforcement
- 25 provisions of section 309(a) and (b).
- 26 Section 3. Sections 403 and 502 of the act are amended to
- 27 read:
- 28 Section 403. Creation of special funds.
- 29 (a) Radiation Protection Fund. -- There is hereby created in
- 30 the General Fund a restricted account to be known as the

- 1 Radiation Protection Fund. Fees and penalties received under
- 2 sections 401 [and 402(b)], 402(b.1)(1), (2), (3) and (4) and
- 3 costs recovered under section 402(b.2) shall be deposited in
- 4 this fund and are hereby appropriated to the department for the
- 5 purpose of carrying out its powers and duties under this act.
- 6 (b) Radiation Emergency Response Fund. -- There is hereby
- 7 created in the General Fund a restricted account to be known as
- 8 the Radiation Emergency Response Fund. Fees received under
- 9 section [402(c)(1),] $\underline{402(c)(1.1)}$, (2) and (3) shall be deposited
- 10 in this fund as provided and are hereby appropriated to the
- 11 agency for the purpose of carrying out its responsibilities
- 12 under Chapter 5.
- 13 (c) Radiation Transportation Emergency Response Fund. -- There
- 14 is hereby created in the General Fund a restricted account to be
- 15 known as the Radiation Transportation Emergency Response Fund.
- 16 Fees received under section 402(c)(4) shall be deposited in this
- 17 fund and are hereby appropriated to the agency for the purpose
- 18 of carrying out its responsibilities under Chapter 6.
- 19 Section 502. Response program.
- 20 In conjunction with the department, the agency shall develop
- 21 a Radiation Emergency Response Program for incorporation into
- 22 the Pennsylvania Emergency Management Plan [development]
- 23 <u>developed</u> by the agency pursuant to Title 35 of the Pennsylvania
- 24 Consolidated Statutes (relating to health and safety). Any
- 25 volunteer organizations which are incorporated into the
- 26 Radiation Emergency Response Program developed under the
- 27 authority of this act shall be consulted prior to such
- 28 incorporation. The Radiation Emergency Response Program shall
- 29 include an assessment of potential nuclear accidents or
- 30 incidents, the radiological consequences and necessary

- 1 protective measures required to mitigate the effects of such
- 2 accidents or incidents. The program shall include, but not be
- 3 limited to:
- 4 (1) Development of a detailed fixed nuclear emergency
- 5 response plan for areas surrounding each nuclear electrical
- 6 generation facility, nuclear <u>fuel</u> fabricator and away-from-
- 7 reactor storage facility. The term "areas" shall be deemed to
- 8 mean the emergency response zone designated by the [NCR] NRC
- 9 Emergency Response Plan applicable to each such fixed nuclear
- 10 facility.
- 11 (2) Notification by nuclear power facility operating
- 12 licensees of municipalities within the areas set forth in
- paragraph (1) of unusual radioactivity as defined in section
- 14 301(d).
- 15 (3) Training and equipping of State and local emergency
- 16 response personnel.
- 17 (4) Periodical exercise of the accident scenarios
- designated in the NRC Emergency Response Plan applicable to
- 19 each fixed nuclear facility.
- 20 (5) Procurement of specialized supplies and equipment.
- 21 (6) Provisions for financial assistance to
- 22 municipalities, school districts, volunteer and State
- agencies as provided for in section 503.
- 24 (7) At a minimum, each nuclear power reactor owner shall
- 25 <u>provide to the department existing plant and radiological</u>
- 26 <u>monitoring data collected by that owner, derived from</u>
- 27 equipment and monitoring methods installed by each owner in
- 28 <u>accordance with the requirements of its license by the</u>
- Nuclear Regulatory Commission. By July 1, 2010 2008, each
- 30 plant owner shall enter into an agreement with the department

- 1 <u>establishing the protocols for providing such data to the</u>
- department through an expedited, secure process. Nothing in
- 3 this section shall be construed to diminish or abrogate any
- 4 existing agreement between the department and a plant owner
- 5 to provide data for the purpose of monitoring plant and
- 6 radiological conditions important to the protection of the
- 7 general public.
- 8 Section 4. The heading of Chapter 6 of the act is amended to
- 9 read:
- 10 CHAPTER 6
- 11 TRANSPORTATION OF [SPENT NUCLEAR FUEL] RADIATION
- 12 RADIOACTIVE MATERIAL

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- Section 5. Sections 601, 602, 603 and 604 of the act are
- 14 amended to read:
- 15 Section 601. General rule.
- 16 It is unlawful for any person to transport upon the highways,
- 17 <u>waterways</u> or rails of this Commonwealth any spent nuclear fuel,
- 18 <u>high-level waste, transuranic waste or a large quantity of</u>
- 19 radioactive material unless that person notifies the agency in
- 20 advance [of transporting the spent nuclear fuel] in accordance
- 21 with [10 C.F.R. 71.5(a) and (b).] 10 CFR Pt. 71 (relating to
- 22 packaging and transportation of radioactive material) regarding
- 23 advanced notification of shipment of irradiated reactor fuel and
- 24 <u>nuclear waste</u>. Notification requirements for transuranic waste
- 25 or a large quantity of radioactive material shall be the same as
- 26 required for irradiated reactor fuel and nuclear waste.
- 27 Section 602. Escort requirements.
- 28 All shipments of spent nuclear fuel or high-level waste
- 29 shipped to, within, through or across the boundaries of the
- 30 Commonwealth shall be escorted by the Pennsylvania State Police.

- 1 All shipments of transuranic waste or large quantities of
- 2 radioactive material shipped to, within, through or across the
- 3 boundaries of this Commonwealth may, at the discretion of the
- 4 Pennsylvania State Police in consultation with the department,
- 5 be escorted by the Pennsylvania State Police.
- 6 Section 603. Authorization.
- 7 Spent nuclear fuel, high-level waste, transuranic waste or a
- 8 <u>large quantity of radioactive material</u> shipments shall be
- 9 authorized by the agency subject to the Commonwealth's authority
- 10 to delay individual highway, waterway and rail shipments due to
- 11 specific holiday [or safety], safety or security considerations
- 12 including, but not limited to, weather, highway, waterway or
- 13 rail conditions.
- 14 Section 604. Radiation Transportation Emergency Response Plan.
- 15 (a) Planning.--The agency shall develop the Transportation
- 16 Emergency Response Plan to respond to accidents involving the
- 17 shipment of spent [fuel] <u>nuclear fuel</u>, <u>high-level waste</u>,
- 18 transuranic waste or a large quantity of radioactive material.
- 19 The plan shall:
- 20 (1) Incorporate local agencies and volunteer
- organizations along the preprescribed routes [for] of
- transport [of spent fuel].
- 23 (2) Incorporate any Commonwealth agency responsible for
- 24 protection of the health and safety of the public as
- 25 necessary and approved by the specific agency.
- 26 (b) Funding of State and local agencies. -- Funds received
- 27 under section 402(c)(4) shall be used to train and equip State
- 28 and local agencies and volunteer organizations in accordance
- 29 with regulations adopted by the council to implement the plan.
- 30 Section 6. Repeals are as follows:

- (1) The General Assembly declares that the repeals under 1 paragraph (2) are necessary to effectuate the amendment of
- 3 sections 103, 302, 402, 403, 502 and 603 of the act.
- (2) The following acts and parts of acts are repealed: 4
- (i) Sections 616-A(3) and 1904-A.2 of the act of 5
- April 9, 1929 (P.L.177, No.175), known as The 6
- Administrative Code of 1929. 7

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- (ii) 35 Pa.C.S. § 7320(d). 8
- (3) All other acts and parts of acts are repealed 9
- insofar as they are inconsistent with this act. 10
- Section 7. This act shall take effect immediately. 11