## THE GENERAL ASSEMBLY OF PENNSYLVANIA

## **HOUSE BILL**

No. 112

Session of 2009

INTRODUCED BY PERRY, BAKER, CAUSER, CUTLER, FAIRCHILD, FLECK, GRELL, GROVE, HELM, HENNESSEY, KAUFFMAN, M. KELLER, MILLER, MOUL, ROCK, STERN, SWANGER, TRUE, WATSON, PICKETT, HUTCHINSON AND BARRAR, JANUARY 30, 2009

REFERRED TO COMMITTEE ON ENVIRONMENTAL RESOURCES AND ENERGY, JANUARY 30, 2009

## AN ACT

- 1 Establishing the Nutrient Reduction Credit Trading Program, the
- Nutrient Reduction Credit Trading Program Board and the
- 3 Chesapeake Bay Advisory Council; and providing for their
- 4 powers and duties and for improving energy efficiency in
- 5 agricultural operations.
- 6 The General Assembly of the Commonwealth of Pennsylvania
- 7 hereby enacts as follows:
- 8 Section 1. Short title.
- 9 This act shall be known and may be cited as the Chesapeake
- 10 Bay Watershed Nutrient Reduction and Credit Trading Act.
- 11 Section 2. Legislative findings.
- 12 The General Assembly finds that:
- 13 (1) The Chesapeake Bay and its tributaries are an
- important natural resource. The Chesapeake Bay watershed
- encompasses more than 14,000,000 acres within this
- 16 Commonwealth which represents 35% of the total area of the
- 17 watershed.
- 18 (2) The Commonwealth is a party, along with Maryland,

- Virginia, Washington, D.C., the Chesapeake Bay Commission and the United States Environmental Protection Agency, to the Chesapeake Bay Program, whose duty it is to restore the environmental integrity of the Chesapeake Bay.
  - (3) The Commonwealth has entered into several multistate agreements, most recently in 2000, to set standards and goals to curtail nutrient and sediment pollution into the Chesapeake Bay from various sources in this Commonwealth.
  - (4) Many of these standards were based on the Federal Water Pollution Control Act (62 Stat. 1155, 33 U.S.C. § 1251 et seq.) requirements necessary to remove the Chesapeake Bay from the Federal list of "impaired" waters and to avoid the United States Environmental Protection Agency's development of a total maximum daily load for the Chesapeake Bay.
  - (5) The 2000 Bay Agreement resulted in the preparation of the Pennsylvania Chesapeake Bay Tributary Strategy by the Department of Environmental Protection. This document released in 2005 sets standards and goals for nutrient and sediment reduction from Pennsylvania point and nonpoint sources.
  - (6) The Chesapeake Bay Tributary Strategy was further refined in 2006, to include a nutrient credit trading program and a phased approach for point source dischargers to meet nutrient reduction goals.
  - (7) Proactive steps can be taken to control nutrient and sediment runoff from agricultural operations, however, a series of financial incentives will be necessary to engage farmers in nutrient reduction techniques and methods.
  - (8) The existing Nutrient Credit Trading Program established by the Pennsylvania Department of Environmental

- 1 Protection is not sufficient to meet the needs of wastewater
- 2 treatment facility operators and farmers, and it is not
- 3 generating the credits needed to allow for future economic
- 4 development.
- 5 (9) There is a need to ensure the implementation and
- 6 availability of a viable nutrient credit trading program to
- 7 serve as an alternative to wastewater treatment plant
- 8 upgrades and to allow for continuing economic growth and
- 9 development within the Commonwealth's portion of the bay
- 10 watershed.
- 11 (10) Additional accountability and oversight is
- 12 necessary to ensure the methods used to attain the standards
- 13 and goals are implemented in a fair and cost-effective manner
- so that meeting the strategy standards and goals does not
- place an unrealistic financial burden on Commonwealth
- taxpayers and does not inhibit economic growth and
- development by limiting future wastewater capacity.
- 18 Section 3. Definitions.
- 19 The following words and phrases when used in this act shall
- 20 have the meanings given to them in this section unless the
- 21 context clearly indicates otherwise:
- 22 "Applicant." A municipality or municipal authority.
- 23 "Authority." The Pennsylvania Infrastructure Investment
- 24 Authority.
- "Best management practice." A practice or combination of
- 26 practices recognized as effective and practical in the
- 27 management or reduction of nutrients or sediment to protect
- 28 surface water or groundwater, considering technological,
- 29 economic and institutional factors.
- 30 "Board." The Nutrient Reduction Credit Trading Program Board

- 1 established in section 5.
- 2 "Chesapeake Bay tributary strategy." A state-specific plan
- 3 outlining a combination of actions that can be utilized to
- 4 address nutrient reductions entering the Chesapeake Bay and its
- 5 tributaries from various sources.
- 6 "Department." The Department of Environmental Protection of
- 7 the Commonwealth.
- 8 "Municipal authority." A public authority established under
- 9 53 Pa.C.S. Ch. 56 (relating to municipal authorities) or the
- 10 former act of May 2, 1945 (P.L.382, No.164), known as the
- 11 Municipality Authorities Act of 1945, which supplies water or
- 12 provides wastewater services to the public for a fee.
- 13 "NPDES." The National Pollutant Discharge Elimination
- 14 System.
- 15 "Nutrient reduction credit." The unit of compliance that
- 16 corresponds with a pound of reduction of discharge of nitrogen,
- 17 phosphorus or sediment to the Chesapeake Bay watershed as
- 18 recognized by the Nutrient Reduction Credit Trading Program
- 19 Board.
- 20 "Nutrient Reduction Credit Trading Program." A program
- 21 designed to improve water quality using public and private
- 22 market mechanisms and which permits entities exceeding certain
- 23 statutory and regulatory requirements to generate credits for
- 24 nutrient reduction strategies that can be purchased and used by
- 25 other entities to produce nutrient reductions and to meet
- 26 regulatory requirements.
- 27 "Nutrient reduction project." A project undertaken by a
- 28 publicly owned wastewater treatment plant to remove either
- 29 nitrogen or phosphorous during the treatment process to meet
- 30 nutrient reduction goals established to reduce the levels of

- 1 these nutrients that enter the Chesapeake Bay and its
- 2 tributaries.
- 3 "Wastewater treatment facility." A facility designed and
- 4 operated for the sole purpose of treating wastewater for
- 5 discharge into the environment. The term includes a wastewater
- 6 treatment plant and any part thereof, including an expansion,
- 7 addition and modification to an existing wastewater treatment
- 8 facility.
- 9 Section 4. Phase-in schedule.
- 10 (a) Establishment. -- The department shall establish a
- 11 multiphased nutrient reduction compliance schedule for
- 12 wastewater treatment facilities required to reduce nutrient
- 13 levels within the Chesapeake Bay watershed.
- 14 (b) Procedures and requirements.--
- 15 (1) The department shall, at a minimum, develop a
- 16 program for wastewater treatment facilities to reduce
- 17 nutrient levels within the Chesapeake Bay watershed in the
- 18 following manner:
- 19 (i) All plants identified by the department with
- flows over 400,000 gallons per day which are not
- 21 presently under annual nutrient load limits as part of
- their operating permit shall be given annual nutrient
- load limits based upon an average of 6 mg/l of total
- nitrogen and 0.8mg/l of total phosphorous at the annual
- average design flow of each wastewater facility.
- 26 (ii) In an effort to achieve nutrient reduction
- compliance levels, a three-tiered compliance schedule
- shall be used. The department shall place each wastewater
- treatment plant in one of three tiers to ensure all
- facilities will be deemed in compliance over a seven-year

- period beginning with permits issued on or after July 1, 2008, and ending June 31, 2015.
- 3 (2) Nothing in this subsection shall be construed to 4 prohibit the right of appeal to NPDES permit conditions by a 5 permittee.
  - (c) New construction. --

- (1) A new wastewater treatment facility at which construction commenced on or after January 1, 2008, shall meet nutrient load limits based upon an average of 4 mg/l total nitrogen and 0.3 mg/l total phosphorus at the annual average design flow. A new system constructed to the limits in this section shall make a one-time monetary assessment to the nutrient reduction credit bank identified under section 8(d)(3). The assessment contribution shall be determined by the Nutrient Reduction Credit Trading Program Board established under section 8(b). The assessment shall, at a minimum, be based upon the difference in treatment level between 4 mg/l of nitrogen and 0.3 mg/l of phosphorus and the zero net discharge limit applied to new facilities through the department under the strategy.
  - (2) The purchase of nutrient credits shall be recognized as an alternative method to meet the zero net discharge limit applied to new facilities that do not meet the criteria in paragraph (1). The purchase of nutrient credits shall also be recognized as an alternative method to meet the zero net discharge limit applied to expansion of existing plants.
  - (3) In the event of an addition, expansion or modification to a wastewater facility, the mass discharge limits contained in this subsection shall apply only to the increase in the annual average design flow, resulting from

- 1 the addition, expansion or modification.
- 2 Section 5. Nutrient Reduction Credit Trading Program.
- 3 (a) Establishment.--The department shall establish the
- 4 Nutrient Reduction Credit Trading Program for the Chesapeake Bay
- 5 watershed and shall administer it in accordance with this
- 6 section.

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- 7 (b) Program board.--
- 8 (1) The Nutrient Reduction Credit Trading Program Board
- 9 is established. The purpose of the board shall be to manage
- 10 and provide oversight to the Nutrient Reduction Credit
- 11 Trading Program.
- 12 (2) The board shall consist of:
- 13 (i) The Secretary of Environmental Protection, or a designee.
- 15 (ii) The Secretary of Agriculture, or a designee.
- 16 (iii) The Executive Director of the authority, or a designee.
- 18 (iv) One representative from county conservation
  19 districts appointed by the State Conservation Commission.
  - (v) One representative from municipal authorities representing wastewater treatment facilities chosen by the Pennsylvania Municipal Authorities Association.
  - (vi) One representative of the housing industry chosen by the Pennsylvania Builders Association.
- (vii) One water quality engineer appointed by the

  chairman of the Joint Legislative Air and Water Pollution

  Control and Conservation Committee.
- 28 (viii) One representative from the agricultural 29 sector appointed by the Secretary of Agriculture.
- 30 (ix) One representative from an environmental

- organization representing an environmental organization related to the Chesapeake Bay appointed by the Secretary of Environmental Protection.
  - (x) Three representatives of local government, one representing boroughs, one representing townships and one representing cities. These representatives shall be chosen by their respective Statewide organizations.
  - (xi) One representative from the Pennsylvania delegation to the Chesapeake Bay Commission appointed by members of the Pennsylvania delegation to the commission.
  - (xii) One representative from the United States

    Department of Agriculture Natural Resources Conservation

    Service appointed by the service's State conservationist

    for Pennsylvania.
- 15 (c) Chairperson.—The board shall elect a chairperson from 16 among its members.
- 17 (d) Powers and duties.—The board will adopt policies and 18 implement programs necessary to manage the Nutrient Reduction 19 Credit Trading Program for the Chesapeake Bay watershed. The 20 board shall have the following specific duties and
- 21 responsibilities:

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- 22 (1) To establish procedures and requirements relating to 23 applications for credits and the process by which 24 applications shall be reviewed consistent with the following:
- 25 (i) Applications shall be reviewed for completeness, 26 technical acceptability and consistency with regulatory 27 and legal requirements.
- (ii) The board shall make a determination on an application to generate credits within 60 days after receipt of a complete application.

- 1 (iii) The board shall post credit application 2 requirements and review procedures on the publicly 3 accessible Internet website of the authority.
  - (iv) Prior to a determination on an application to generate credits, the board shall verify that the relevant regulatory and legal requirements have been met by the applicant. The board shall establish a process to verify nutrient and sediment reductions after approval of an application.
  - (2) To develop a method to calculate nutrient reduction credits consistent with the following:
    - (i) The credits shall be measured in terms that correspond to a unit of compliance and a time period.
    - (ii) The board shall, by regulation, establish procedures and methodologies by which credits will be calculated. The procedures and methodologies may have general applicability or they may be specific to a particular watershed, as determined by regulation.
    - (iii) The board shall ensure that credits shall not be generated from the purchase and idling of whole or substantial portions of farms to provide credits for use offsite. Credits may be generated when converting one land use to another, as provided by regulation.
  - (3) To create a registry of credits that have been approved and that are available for sale. The board shall track and verify the disposition of credits registered under this section.
  - (4) To permit credits approved and registered under this section to be used to meet the requirements of permits administered by the department, including National Pollutant

- Discharge Elimination System (NPDES) permits required under the Federal Water Pollution Control Act (62 Stat. 1155, 33 U.S.C. § 1251 et seq.).
- To purchase nutrient reduction credits from 4 5 wastewater treatment facilities or agricultural or other 6 sources. The board shall utilize \$50,000,000 in funds 7 provided by the Environmental Protection Agency and 8 previously approved by the authority board of directors for 9 use in the establishment of a nutrient credit trading 10 program. Credits shall be available for purchase only after department certification that nutrient and sediment 11 12 reductions have occurred or will occur upon implementation of 13 the proposed nutrient reduction project. The board shall 14 cooperate with the department and the Department of 15 Agriculture or their agents to verify credits from wastewater treatment facilities and agricultural and other sources. The 16 17 board may allow approved third parties to perform credit 18 verifications on its behalf or on behalf of entities that 19 have submitted applications.
  - (6) To offer for sale nutrient reduction credits to wastewater treatment facilities, developers, municipalities, nonpoint source entities and others required to meet nutrient reductions.
  - (7) (i) To establish a nutrient reduction credit bank to provide for the purchase and sale of credits within the Nutrient Reduction Credit Trading Program. The board will establish procedures and set monetary assessments to generate a system of nutrient credits that can be used by wastewater treatment facilities and others to reach compliance with nutrient reduction requirements

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- identified by the department and to allow for new growth.
  - (ii) Nothing in this subsection shall be construed to prohibit the private purchase and sale of credits within the trading market.
    - (8) For wastewater treatment facilities, to establish phased payment schedules, provided the payment amounts will fund all annual reductions that are necessary to meet nutrient reduction requirements identified by the department as follows:
      - (i) The payment amounts for new facilities shall be sufficient to fund all necessary annual reductions given the facilities' anticipated design flow and connections schedule so that zero net discharge requirements are met.
      - (ii) The bank shall use these funds to provide grants to the agricultural sector to support projects that will implement the highest value nutrient reduction best management practices.
      - (iii) Preference shall be given to those nutrient reduction best management practices that provide the greatest nutrient reductions for the least amount of cost and that, once implemented, generate credits on a continuing annual basis.
      - (iv) Excess credits generated from the transactions shall be made available for purchase by wastewater treatment facilities, upon request, if needed to meet nutrient effluent limits.
    - (9) To offer for sale excess credits held by the bank identified under paragraph (7), but shall hold a minimum percentage of credits as a reserve balance to offset any failures or loss of nutrient reduction credits within the

bank. In addition to this reserve, the board shall hold a
minimum percentage of credits in reserve for new growth. The
board shall set these reserves at percentages it deems
necessary, but in no instance shall the reserve for new

growth be lower than 5% of all credits held by the bank.

- (10) To process credits on a continual basis. The board shall establish and update as necessary the selling price of nutrient reduction credits and post the information regarding cost and methods of purchasing and selling credits on the Internet website of the authority. The board shall post on the Internet website of the authority a list of those projects that have been certified to generate credits by the department.
- (11) To establish overall time frames for the use of nutrient reduction credits purchased through the bank necessary to meet the compliance requirements established by the department. The board shall develop and implement a process that allows credits to be purchased in advance of when they may be needed to ensure compliance with the requirements established by the department.
- To establish a subcommittee to provide technical assistance to entities proposing credit-generating projects. Members of the subcommittee shall be appointed by the board and shall have appropriate technical training and experience. The subcommittee shall conduct a technical review of credit proposals consistent with the department's existing quidance on credit proposal reviews and make a recommendation regarding credit certification. Proposals that have undergone technical review by the subcommittee and are recommended by the subcommittee for certification shall be submitted by the

- 1 board to the department for review. The department shall
- 2 render a decision on the proposal within 60 days of receipt
- of the submission from the board. A proposal on which the
- 4 department fails to act within this time period shall be
- 5 deemed approved.
- 6 (13) To establish procedures to allow the nutrient
- 7 reduction credit bank to act as a clearinghouse and make
- 8 available information on the availability of nutrient
- 9 reduction credits from public and private sector
- 10 organizations other than the nutrient reduction credit bank.
- 11 (e) Regulations. -- The authority, the department and the
- 12 Department of Agriculture may jointly develop regulations as
- 13 necessary to implement the provisions of this act. The
- 14 regulations shall be promulgated in accordance with the act of
- 15 June 25, 1982 (P.L.633, No.181), known as the Regulatory Review
- 16 Act.
- 17 (f) Administration. -- The authority shall provide all
- 18 necessary administrative and technical support for the operation
- 19 of the Nutrient Reduction Credit Trading Program and the
- 20 Nutrient Reduction Credit Trading Board. The authority may enter
- 21 into contracts to assist in administration of the bank, provide
- 22 technical assistance to entities proposing credit-generating
- 23 projects and provide all other necessary technical and
- 24 administrative support to the board.
- 25 Section 6. Accountability.
- 26 (a) Evaluation. -- The department shall annually evaluate
- 27 progress toward meeting the needed reductions in nutrients and
- 28 sediments entering the Chesapeake Bay watershed. This evaluation
- 29 shall consist of a quantitative and qualitative analysis on the
- 30 progress made in reaching the nutrient reduction goals for all

- 1 point and nonpoint sources delineated in the Chesapeake Bay
- 2 tributary strategy. In conducting the evaluation, the department
- 3 shall annually review and estimate the costs and benefits
- 4 related to compliance with the Chesapeake Bay tributary strategy
- 5 by all affected economic sectors.
- 6 (b) Contents of evaluation. -- The evaluation shall include,
- 7 but may not be limited to:
- 8 (1) The number and type of nutrient reduction credit
- 9 transactions.
- 10 (2) A description of the methods that have been
- implemented by the various sectors toward achieving
- 12 compliance with the established nutrient reduction goals.
- 13 (3) A review of any changes to the financial resources
- and regulatory requirements that other states in the
- 15 Chesapeake Bay watershed have implemented in regard to the
- 16 nutrient reduction goals.
- 17 (c) Submittal of evaluation. -- The evaluation shall be
- 18 submitted with the annual report required under section 8.
- 19 (d) Program changes. -- The department shall identify any and
- 20 all substantive changes that may be necessary to ensure
- 21 compliance with the nutrient reduction requirements needed. The
- 22 department shall present recommendations to the General Assembly
- 23 for any substantive changes needed to the nutrient and sediment
- 24 reduction requirements, storm water management reduction
- 25 requirements, stream loading or other requirements as deemed
- 26 necessary.
- 27 Section 7. Chesapeake Bay Advisory Council.
- 28 (a) Establishment. -- The Chesapeake Bay Advisory Council is
- 29 established as an advisory body to the department.
- 30 (b) Composition. -- The advisory council shall be composed of

- 1 individuals representing the State Conservation Commission,
- 2 local governments, environmental organizations, county
- 3 conservation districts, Federal and State agencies, educational
- 4 institutions, agricultural organizations, businesses, watershed
- 5 organizations and other groups as deemed appropriate by the
- 6 Secretary of Environmental Protection. Advisory council
- 7 membership shall not be limited to a specific number, but shall
- 8 be determined by the department.
- 9 (c) Duties.--The advisory council shall:
- 10 (1) Advise the department in all matters relating to the
- 11 Chesapeake Bay and its tributaries and in the implementation
- of methods designed to provide for nutrient reductions
- entering the bay and its tributaries.
- 14 (2) Provide citizen input to the department on the
- 15 Commonwealth's efforts to meet its commitments in the
- 16 Chesapeake 2000 Agreement, as well as future agreements.
- 17 (3) Advise the department and provide input on the
- 18 Commonwealth's tributary strategies.
- 19 (4) Advise the department on agricultural and other
- appropriate nonpoint source issues within the Chesapeake Bay
- 21 watershed.
- 22 (5) Advise the department on the implementation of
- programs under the Chesapeake Bay Nonpoint Source Pollution
- 24 Abatement Program.
- 25 (6) Provide recommendations to the department for
- 26 communicating with watershed groups, Federal and State
- agencies, local governments and others in an effort to build
- further support for the Chesapeake Bay Program.
- 29 (7) Provide input, comments and recommendations to the
- 30 department on educational strategies targeted to the needs of

- 1 local citizens, businesses, schools, communities, local
  2 governments and watershed groups.
  - (8) Report to and advise the department on emerging issues and trends pertinent to the Chesapeake 2000 Agreement and other issues relating to the Chesapeake Bay and its tributaries and offer recommendations to the department to enhance or modify program activities.
  - (9) Provide general comment to the department and remain apprised of water quality and resource management issues that are addressed by the Chesapeake Bay Program task forces and committees.
  - (10) Provide input to the department on the overall implementation of the Chesapeake Bay tributary strategy, including assistance in annually evaluating the costs, benefits and specific implementation methods used to meet the nutrient reduction goals.
- 17 (d) Evaluation.--

- (1) The advisory council, in conjunction with the citizens advisory council to the department, shall review the results of the department's evaluation of the progress toward meeting the needed reductions of nutrients and sediments entering the Chesapeake Bay and its tributaries.
  - (2) The department shall forward all information for review to the advisory council and the citizens advisory council within 30 days of the department's finalization of the results.
- 27 (3) The advisory council and the citizens advisory
  28 council shall issue the results of their findings in an
  29 annual report to the chairman and minority chairman of the
  30 Environmental Resources and Energy Committee of the Senate

- 1 and the chairman and minority chairman of the Environmental
- 2 Resources and Energy Committee of the House of
- Representatives no later than March 15 of each year.
- 4 Section 8. Report to standing committees.
- 5 (a) Content.--
- 6 (1) The authority and the department shall submit a
- 7 joint annual report to the chairman and the minority chairman
- 8 of the Environmental Resources and Energy Committee of the
- 9 Senate, the chairman and minority chairman of the
- 10 Environmental Resources and Energy Committee of the House of
- 11 Representatives and the Pennsylvania delegation of the
- 12 Chesapeake Bay Commission no later than July 1 following the
- first fiscal year or any portion thereof in which the program
- is in effect and no later than July 1 for all succeeding
- fiscal years in which the program is in effect.
- 16 (2) The report shall include:
- 17 (i) A list of all of the recipients of loans or
  18 grants awarded by the authority in the previous fiscal
- 19 year.
- 20 (ii) The amount of the loans or grants awarded.
- 21 (iii) A description of the nutrient reduction
- 22 project and the public purposes that it advances.
- 23 (iv) The documentation submitted by the applicant
- demonstrating that the nutrient reduction project met at
- least one of the criteria under section 6(b). The report
- 26 shall include the results of the evaluation and
- 27 recommendations required under section 6.
- 28 (v) A description of all activities conducted by the
- 29 Nutrient Reduction Credit Trading Program Board for that
- 30 reporting period.

- 1 (b) Publication. -- The authority shall post a copy of the
- 2 report to the standing committees on the Internet websites of
- 3 the authority and the department. The reports shall remain on
- 4 the sites until the reports for the next year are posted.
- 5 Section 9. Improving energy efficiency in agricultural
- 6 operations.
- 7 (a) General authority. -- The conservation districts shall
- 8 work in close cooperation with the agricultural community to
- 9 deliver a system of technical assistance designed to assist with
- 10 conservation planning requirements, in the production of
- 11 biofuels, feedstocks and appropriate energy efficiency
- 12 applications and best management practices as they relate to
- 13 reducing the discharge of nutrients and other pollutants into
- 14 the Chesapeake Bay watershed.
- 15 (b) Energy efficiency and energy resources program. -- The
- 16 conservation districts shall engage in the development of energy
- 17 efficiency and energy resources which shall include, but may not
- 18 be limited to, delivering technical assistance to producers to
- 19 improve the energy efficiency of farming operations and to
- 20 provide technical assistance in the development and
- 21 implementation of best management practices related to cropping
- 22 systems to be used as feedstock for the production of biofuels.
- 23 (c) Conservation planning. -- The conservation districts shall
- 24 develop and implement an electronic-based system of providing
- 25 technical assistance to the agricultural sector in meeting
- 26 Federal and State natural resources planning requirements,
- 27 including the development of appropriate training programs and
- 28 materials.
- 29 (d) Annual interfund transfer. -- The Governor shall transfer
- 30 \$10,000,000 annually from the State Stores Fund to the

- 1 Conservation District Fund. The amount shall be distributed to
- 2 the conservation districts to carry out the activities
- 3 identified in subsections (b) and (c).
- 4 Section 10. Effective date.
- 5 This act shall take effect immediately.