Regulatory Analysis		This space for use by IRRC	
Form			2006 MAY 24 AM 10: 54
(1) Agency			INDEPENDENT REGULATORY REVIEW COMMISSION
Department of Community and Economic	ic Developm	ent	TENEY OCTOROGY
(2) I.D. Number (Governor's Office Use	)		
4-86			IRRC Number: 2540
(3) Short Title			
Building Energy Conservation Standards	3		
(4) PA Code Cite	(5) Agency Contacts & Telephone Numbers		
12 Pa. Code Chapter 147	Primary Contact: Matthew Speicher, 717-720-7317		
	Secondary Contact: Mark Conte, 717-720-7416		
(6) Type of Rulemaking (check one)		(7) Is a 120-Da	ny Emergency Certification Attached?
			he Attorney General he Governor
(8) Briefly explain the regulation in clea	r and nontec	hnical language.	
This regulation repeals the existing reg conservation standards for the implementation	ulation whic entation of th	h establishes ad ne Building Ene	ministrative proceedings and energy rgy Conservation Standards Act.
(9) State the statutory authority for the re	egulation and	d any relevant st	ate or federal court decisions.
This regulation is proposed for repeal be with current law. The current regulation standards for the implementation of the 7210.101 et seq.), known as the Buildin Conservation Standards Act has been re No. 45), (35 P.S. § 7201.101 et seq.), as regulation is, therefore, unnecessary.	establishes a act of Decen g Energy Co pealed and re	administrative pants of the part of the pa	rocedures and energy conservation P.L. 1203, No. 222), (35 P.S. § dards Act. The Building Energy ct of November 10, 1999 (P.L. 491,

#### **Regulatory Analysis Form**

- (10) Is the regulation mandated by any federal or state law or court order, or federal regulation? If yes, cite the specific law, case or regulation, and any deadlines for action.
- No. However, because the Building Energy Conservation Standards Act on which the existing regulation is based has been repealed and replaced by the act of November 10, 1999 (P.L. 491, No. 45), (35 P.S. § 7201.101 et seq.), as amended, known as the Pennsylvania Construction Code Act, the repeal of this regulation is necessary.
- (11) Explain the compelling public interest that justifies the regulation. What is the problem it addresses?

The repeal of this regulation will avoid any confusion by the public regarding which agency regulates building energy conservation standards (now controlled by the Department of Labor and Industry) and which standards apply.

- (12) State the public health, safety, environmental or general welfare risks associated with nonregulation.
- N/A. Labor and Industry now regulates building energy conservation.
- (13) Describe who will benefit from the regulation. (Quantify the benefits as completely as possible and approximate the number of people who will benefit.)

N/A

(14) Describe who will be adversely affected by the regulation. (Quantify the adverse effects as completely as possible and approximate the number of people who will be adversely affected.)

N/A

(15) List the persons, groups or entities that will be required to comply with the regulation. (Approximate the number of people who will be required to comply.)

N/A

(16) Describe the communications with and input from the public in the development and drafting of the regulation. List the persons and/or groups who were involved, if applicable.

N/A

(17) Provide a specific estimate of the costs and/or savings to the regulated community associated with compliance, including any legal, accounting or consulting procedures which may be required.

N/A

#### **Regulatory Analysis Form**

(18) Provide a specific estimate of the costs and/or savings to local governments associated with compliance, including any legal, accounting or consulting procedures which may be required.

N/A

(19) Provide a specific estimate of the costs and/or savings to state government associated with the implementation of the regulation, including any legal, accounting, or consulting procedures which may be required.

N/A

(20) In the table below, provide an estimate of the fiscal savings and costs associated with implementation and compliance for the regulated community, local government, and state government

for the current year and five subsequent years.

for the current year and i	Current FY Year	FY +1 Year	FY +2 Year	FY +3 Year	FY +4 Year	FY +5 Year
SAVINGS:	\$	\$	\$	\$	\$	\$
Regulated Community	0	0	0	0	0	0
<b>Local Government</b>	0	0	0	0	0	0
State Government	0	0	0	0	0	0
<b>Total Savings</b>	0	0	0	0	0	0
COSTS:						
Regulated Community	0	0	0	0	0	0
Local Government	0	0	0	0	0	0
State Government	0	0	0	0	0	0
<b>Total Costs</b>	0	0	0	0	0	0
REVENUE LOSSES:						
Regulated Community	0	0	0	0	0	0
Local Government	0	0	.0	0	0	0
State Government	0	0	0	0	0	0
Total Revenue Losses	0	0	0	0	0	0

(20a) Explain how the cost estimates listed above were derived.

N/A

	Regu	latory Analysis	Form	
(20b) Provide the pa		ture history for progra		regulation.
Program	FY -3	FY -2	FY -1	Current FY
N/A				
(21) Using the cost- outweigh the adverse		l provided above, expla	in how the benefits	of the regulation
N/A				
(22) Describe the no		ves considered and th	e costs associated w	vith those alternatives.
N/A	for their dishinssur.			
		.1 1 1.1		24.41
(23) Describe altern Provide the reasons		mes considered and the	ne costs associated v	with those schemes.
N/A.				
	Regu	ılatory Analysis	Form	
(24) Are there any provisions and the c	provisions that are mo		ral standards? If ye	es, identify the specific ion.
N/A				
	regulation compare vadvantage with other		tes? Will the regula	ation put Pennsylvania
N/A				
	ntion affect existing o		s of the promulgating	ng agency or other state
No.				

#### **Regulatory Analysis Form**

(27) Will any public hearings or informational meetings be scheduled? Please provide the dates, times, and locations, if available.

No.

(28) Will the regulation change existing reporting, record keeping, or other paperwork requirements? Describe the changes and attach copies of forms or reports which will be required as a result of implementation, if available.

Yes. The Department of Community and Economic Development will no longer regulate building energy conservation standards. The Department of Labor and Industry will do so under the authority of the Pennsylvania Construction Code Act and its corresponding regulations.

(29) Please list any special provisions which have been developed to meet the particular needs of affected groups or persons including, but not limited to, minorities, elderly, small businesses, and farmers.

N/A.

(30) What is the anticipated effective date of the regulation; the date by which compliance with the regulation will be required; and the date by which any required permits, licenses or other approvals must be obtained?

Upon publication of the regulation in the Pennsylvania Bulletin.

(31) Provide the schedule for continual review of the regulation.

N/A

CDL-1

## FACE SHEET FOR FILING DOCUMENTS WITH THE LEGISLATIVE REFERENCE BUREAU

(Pursuant to Commonwealth Documents Law)

RECEIVED

2006 NAY 24 AM 10: 54

INDEPENDENT REGULATORY REVIEW COMMISSION

DO NOT WRITE IN THIS SPACE

Copy below is hereby approved as to form and legality. Attorney General  By:	Copy below is hereby certified to be a true and correct copy of a document issued, prescribed or promulgated by:  Department of Community and Economic Development (Agency)	Copy below is hereby approved as to form and legality. Executive or Independent Agencies.  Hindrew C. Clark  By:
Date of Approval	Document/Fiscal Note No. 04-86/ Date of Adoption:  By:  Ken Klothen	MAY 9 2006  Date of Approval  (Deputy General Counsel)
☐ Check if applicable. Copy not approved. Objections attached.	Title: Deputy Secretary for Community Affairs and Development	☐ Check if applicable. No Attorney General approval or objection within 30 days after submission.

1 2540

TITLE 12. COMMERCE, TRADE AND LOCAL GOVERNMENT

PART V. COMMUNITY AFFAIRS AND DEVELOPMENT

SUBPART C. COMMUNITY DEVELOPMENT AND HOUSING

CHAPTER 147. BUILDING ENERGY CONSERVATION STANDARDS

#### **PREAMBLE**

The Department of Community and Economic Development, under the authority of Section 7201.401 of the act of December 15, 1980 (P.L. 1203, No. 222),l (35 P.S. § 7210.101 et seq.), known as the Building Energy Conservation Act, hereby amends Title 12 of the Pennsylvania Code by deleting Chapter 147. The purpose of the regulation is to repeal Chapter 147 in its entirety as the regulation is outdated and no longer consistent with current law, making the regulation unnecessary.

#### **Introduction**

The current regulation establishes administrative procedures and energy conservation standards for the implementation of the Building Energy Conservation Standards Act.

#### **Analysis**

The existing regulation is outdated and no longer consistent with current law. The Building Energy Conservation Standards Act has been repealed and replaced by the act of November 10, 1999 (P.L. 491, No. 45), (35 O.S. § 7201.101 et seq.), as amended, known as the Pennsylvania Construction Code Act. Therefore, the regulation is unnecessary.

#### **Fiscal Impact**

- (a) Commonwealth. There will be no fiscal impact on the Commonwealth.
- (b) Political Subdivisions. There will be no fiscal impact on political subdivisions.
  - (c) Public. There will be no fiscal impact on the public.

#### **Paperwork**

The repeal of this regulation will eliminate any paperwork requirements now in existence.

#### **Notice**

Notice of proposed rulemaking has been omitted under section 204(2) and (3) of the act of July 31, 1968 (P.L. 769, No. 240)(45 P.S. §1204), which specify that a regulation may be adopted without notice of proposed rulemaking if proposed rulemaking procedures are "in the circumstances impracticable, unnecessary, or contrary to the public interest"; or if they relate to "Commonwealth property, loans, grants, benefits or contracts." The proposed rulemaking procedures in this instance is unnecessary, because the existing regulation is outdated and no longer consistent with current law.

#### **Regulatory Review**

Under Section 5(a) of the Regulatory Review Act, the Act of June 30, 1989 (P.L. 73, No. 19), (71 P.S. §§745.1 - 745.15), the agency submitted a copy of the regulation with proposed rulemaking omitted on May 23, 2006 to the Independent Regulatory Review Commission, the Chairperson of the House Commerce Committee, and the Chairperson of the Senate Community and Economic Development Committee. On the same date, the regulation was submitted to the Attorney General for review and approval pursuant to the Commonwealth Attorneys Act. In accordance with Section 5(c)of the Act, the regulation was [deemed] approved by the House Committee on (date) and [deemed] approved the regulation.

#### **Effective Date/Sunset Date**

- (a) The regulation will be effective upon publication in the *Pennsylvania Bulletin*.
  - (b) A sunset date is not applicable because the regulations are being repealed.

#### **Contact Person**

Interested persons are invited to submit in writing any comments, suggestions or objections regarding the proposed regulation to Matthew Speicher, Assistant Counsel, Office of Chief Counsel, Department of Community and Economic Development, Commonwealth Keystone Building, 4<sup>th</sup> Floor, 400 North Street, Harrisburg, PA 17120 (717-720-7317); and/or Mark Conte, Chief, Housing Standards Division, Office of Community Development, Department of Community and Economic Development, Commonwealth Keystone Building, 4<sup>th</sup> Floor, 400 North Street, Harrisburg, PA 17120 (717-720-7416).

#### Findings and Order

The Department of Community and Economic Development finds:

- (1) The proposed rulemaking procedures in §§201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202), known as the Commonwealth Documents Law, are inapplicable because they are unnecessary as the existing regulation is outdated and no longer consistent with current law.
- (2) That public notice of intention to adopt the regulations has been omitted under section 204 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. § 1204) and the regulations thereunder, 1 Pa. Code § 7.4.
- (3) That delay in implementing the regulation will have a serious adverse impact on the public interest.

The Department of Community and Economic Development, acting under the authorizing statute, orders:

- (1) That the regulations of the Department of Community and Economic Development, 12 Pa. Code, are amended by deleting Chapter 147 in its entirety set forth in Annex A.
- (2) That the Department of Community and Economic Development shall submit this order and Annex A to the Office of Attorney General and the Office of General Counsel for approval as to legality as required by law.
- (3) That this order shall take effect upon publication in the <u>Pennsylvania</u> <u>Bulletin</u>.

By the Department of Community and Economic Development

Dennis Yablonsky, Secretary

#### ANNEX A

# TITLE 12. COMMERCE, TRADE AND LOCAL GOVERNMENT PART V. COMMUNITY AFFAIRS AND DEVELOPMENT CHAPTER 147. BUILDING ENERGY CONSERVATION STANDARDS

#### [§ 147.1. Purpose.

The purpose of this chapter is to interpret and make specific chapter 4 of the act (35 P. S. § 7201.401). This chapter establishes administrative procedures and energy conservation standards for the implementation of the act which will grant to the Department and direct it to exercise specific authority in residential building construction to assure that construction is performed using materials and techniques that will provide for energy conservation in the future operation and maintenance of the buildings. This chapter sets forth minimum building energy conservation standards for the construction of Use Group R-3 buildings and renovations under section 401 of the act (35 P. S. § 7201.401).

#### § 147.1a. Scope.

This chapter sets forth minimum prescriptive and performance energy conservation requirements for the design of new buildings and additions to existing buildings that provide for residential occupancies for human occupancy. These requirements are achieved by regulating the design and construction of the exterior envelope and the selection and installation of Heating Ventilation and Air Conditioning (HVAC) service water heating systems and equipment for effective use of energy. Buildings shall be designed to comply with the requirements of § 147.32 or § 147.33 (relating to minimum conservation standards—prescriptive requirements; or performance design alternatives).

#### § 147.2. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

Act—The Building Energy Conservation Act (35 P. S. § § 7201.101—7201.602).

Addition—An extension to an existing Use Group R-3 building, including a manufactured and modular home. This chapter only applies to the portion of the building which is being added and not to the entire building.

Coefficient of performance (heat-pump heating)—The ratio of the rate of net heat output by the heat pump to the rate of total onsite energy input to the heat pump, expressed in consistent units and under designated rated conditions.

Committee—The Building Energy Conservation Committee established by the act.

Conditioned space—A space within a Use Group R-3 building and maintained above 55°F by design.

Design energy consumption—A building's energy consumption calculated using the Modified Degree Day Approach described in Chapter 28 of the ASHRAE 1981 Fundamentals Handbook, 1985 calculated heat loss rate through the building envelope under design conditions, including filtration.

Exterior wall—Wall areas; peripheral edges of floors, window areas, including sash, and door areas, where the surfaces enclose a conditioned space.

Floor area of conditioned space—The horizontal projection of that portion of interior space which is provided with a positive heating source capable of maintaining 55°F or more by design.

Glazing—Transparent or translucent materials in exterior openings.

Glazing to conditioned floor space ratio—Equal to the sum of the area of glazing surfaces divided by the sum of conditioned space floor areas. Equivalent glazing ratios shall be allowed where south facing glazing is increased according to the proportions given in the following equation:

Glass area (North) x 1.1

Glass area (East) x 1.0

Glass area (West) x 1.0

Glass area (South) x 0.7

Historic building—A building determined by the State Historic Preservation Officer to meet the criteria for listing on the National Register of Historic Places, but only to the extent that compliance with the act would prevent preservation of the historic or architectural integrity of the building.

*Infiltration*—The uncontrolled inward air leakage through cracks and interstices in a building element and around windows and doors of a building caused by the pressure effects of wind and the pressure effect, or both, and the pressure effect of differences in the indoor and outdoor air density.

Local enforcement agency—The unit of local government with authority to make inspections and to enforce the statutes, ordinances and regulations promulgated in this Commonwealth that establish standards and requirements applicable to the design, construction, installation, alteration or repair of buildings.

Local government—A county, city, borough, incorporated town, township or similar general purpose unit of government which may be created by the General Assembly with authority to establish standards and requirements applicable to the design, construction, installation, alteration and repair of buildings.

Nondepletable energy source—A source of energy derived from the environment. The term includes solar radiation, geothermal, stored heat in bodies of surface waters and aquifers, winds, action of tides and waves and nocturnal thermal exchanges. Nondepletable energy may be utilized through active mechanical systems or through passive design features.

Notice of intent to construct—The notice required to be filed with the Department or a local government under section 306 of the act (35 P. S. § 7201.306).

*Person*—Individuals, partnerships, associations, sole proprietorships, companies, corporations and their lessees, assignees, trustees, receivers, executors, administrators or their successors in interest.

Public utility—Persons or corporations in this Commonwealth owning or operating equipment or facilities for producing, generating, transmitting, distributing or furnishing electricity, to or for the public for compensation for the purpose of heating or cooling residential buildings. The term does not include the following:

- (i) A generator, producer or manufacturer of electricity, gas or steam not engaged in distributing the electricity, gas or steam directly to the public for compensation.
  - (ii) A person not otherwise a public utility who furnished services only to oneself.
- (iii) A *bona fide* cooperative association which furnishes service only to its stockholders or members on a nonprofit basis.

Recovery efficiency (water heater)—The ratio of the heat absorbed by the water to the energy input delivered to the heating unit during the period that the water temperature is raised from the inlet temperature.

*Renovation*—The rehabilitation of the existing Use Group R-3 building with the following conditions:

- (i) The rehabilitation of the existing building which requires more than 25% of the gross floor area or volume of the entire building to be rebuilt.
- (ii) Cosmetic work, such as painting, wall covering, wall paneling, floor covering and suspended ceiling work may not be included.

(iii) This chapter only applies to the portion of the building being renovated.

Residential building—A structure as defined in section 103 of the act (35 P. S. § 7201.103), and renovation thereto, the actual construction or design, or both, which commenced after March 29, 1986. The structure is arranged for the use of one- or two-family dwelling units, and row houses, townhouses and garden apartment construction, not exceeding three stories in height. The structure is used for residential purposes, whenever each unit has its own individual and self-supporting heating, ventilating or air conditioning system.

Residential service—The furnishing of energy by a public utility for the purpose of heating or cooling a residential building.

Resistance, thermal (R)—A measure of the ability to retard the flow of heat. The R value is the reciprocal of a heat transfer coefficient expressed in units of Btu per hour per square foot per degree F.

Service water heating—Supply of hot water for domestic purposes other than comfort heating.

South facing—An orientation facing within 22 1/2° of true south.

Standby loss—Heat loss occurring while maintaining a design water temperature during periods when no hot water is being drawn from the water tank.

Steady state efficiency—Efficiency obtained by dividing heating output by heating input in Btu per hour, as determined by ANSI/ASHRAE 103-82.

Use group R-3—Buildings arranged for the use of one- or two-family dwelling units, including not more than five lodgers or boarders per family, and row houses, townhouses, and garden apartment construction not exceeding three stories in height used for residential purposes whenever each unit has its own individual and self-supporting heating, ventilating and air conditioning systems.

Utility provider—A municipal corporation in this Commonwealth owning or operating equipment or facilities for producing, generating, transmitting, distributing or furnishing electricity to or for the public within its corporate limits for compensation for any purpose, or an electric cooperative corporation created under the Electric Cooperative Corporation Act (15 P. S. § § 12401—12438) and which provides retail electric service to members on a nonprofit basis. The term does not include:

- (i) A public utility regulated by the Pennsylvania Public Utility Commission under 66 Pa.C.S. § § 101—2503 (relating to the Public Utility Code).
- (ii) A generator, producer or manufacturer of electricity, gas or steam not engaged in distributing electricity, gas or steam directly to the public for compensation.

- (iii) A person or corporation not otherwise a public utility which furnishes service only to itself.
- (iv) A generator, producer or manufacturer of gas or steam engaged in distributing gas or steam to the public for compensation.

#### § 147.3. Requirement of certification—Notice of Intent to Construct.

- (a) Prior to construction of a building classified as Use Group R-3, the builder/contractor shall notify the Department on a Notice of Intent to Construct form. The completed Notice of Intent to Construct form shall be mailed by first class mail and shall be accompanied by a check or money order. The filing fee amount is calculated at a rate of \$7 per new residential dwelling unit, addition to or renovation of a dwelling unit.
- (b) When a builder/contractor intends to build row houses, townhouses, garden apartments or condominiums—as defined under the Use Group R-3 structures—only one Notice of Intent to Construct form shall be filed. It shall be accompanied by a check or money order in a filing fee amount calculated at the rate of \$7 per dwelling unit.
- (c) When a builder/contractor intends to build one or more single-family housing units in the same subdivision, only one Notice of Intent to Construct form shall be filed, accompanied by a check or money order in a filing fee amount calculated at the rate of \$7 per dwelling unit.
- (d) When a builder/contractor intends to construct a building classified as Use Group R-3 in a local government jurisdiction electing to administer the Use Group R-3 provisions of the act, as provided in § 147.17 (relating to local election—Use Group R-3), the builder/contractor shall file the Notice of Intent to Construct form with the local government agency in charge of the administration of the act. The filing fee amount, if applicable, will be paid to the local government jurisdiction having elected to administer the Use Group R-3 provisions of the act.
- (e) If a person intends to construct a single-family residence and will also become sole owner, a Notice of Intent to Construct form shall be filed and shall be accompanied by a check or money order in a filing fee amount of \$7.
- (f) For additions to, or renovations of, structures classified as Use Group R-3, a Notice of Intent to Construct form shall be filed and shall be accompanied by a check or money order in a filing fee amount of \$7 for each addition or renovation.

## § 147.4. Utility companies to require compliance certification copy of Notice of Intent to Construct.

Public utilities and utility providers shall require receipt of the appropriate compliance certification copy of the Notice of Intent to Construct form prior to providing connection of utility services.

#### § 147.5. Procedures for requesting and filing Notice of Intent to Construct forms.

- (a) A person, builder or contractor intending to construct, add to or renovate a building classified as Use Group R-3, shall contact the nearest public utility under 52 Pa. Code Chapter 69 (relating to general orders, policy statements and guidelines on fixed utilities) or utility provider to obtain the appropriate number of Notice of Intent to Construct forms.
- (b) Upon receipt of the Notice of Intent to Construct form, the Department will record, certify and process the form. Within 2 working days after receipt, the Department will return specified copies of the form by first class mail to the person, builder or contractor who filed the form. The specified copies of the certified Notice of Intent to Construct to be returned are:
  - (1) The builder/contractor copy B.
  - (2) Compliance certification copy A—utility company service connection release.
  - (3) Compliance certification copy B—utility company service connection release.

#### § 147.6. Failure to provide Notice of Intent to Construct form.

The Department, after hearing, may assess a civil penalty payable to the Commonwealth, not to exceed \$100, upon a builder who fails to give the notice as required by § 147.3 (relating to requirement of certification—Notice of Intent to Construct). In determining the amount of civil penalty, the Department will consider the willfulness of the violation and the cost incurred by the Department in discovering the violation. In the event a builder fails to give the notice required by section 303(a) of the act (35 P. S. § 7201.303(a)), on a second or subsequent occasion, the Department will assess upon the builder a civil penalty payable to the Commonwealth of \$200.

#### § 147.7. Requirement of warranty.

- (a) Upon completion of construction of a building classified as Use Group R-3, the builder shall warrant to the owner in writing that the building has been constructed under this chapter. The warranty shall be a document separate from the contract, and shall be in the following suggested form, or as otherwise provided by the builder:
- I, (builder), hereby warrant to (owner) the premises known as (description) is constructed in accordance with the provisions of the Act of December 15, 1980 (No. 222), as amended, known as the "Building Energy Conservation Act." This law provides you with legal remedies if your home is not built according to the State standards. If you would like the State to do an energy audit of your home to determine if it conforms to State standards, you may call the Pennsylvania Department of Community and Economic Development (or local municipality) at (telephone), and they will perform an inspection

of your home for a fee of \$35, or as determined by the Department at the amount necessary to cover the costs incurred to conduct the energy audit.

- (b) The warranty of the builder/contractor shall further extend to subsequent purchasers from a new owner. This warranty may not extend beyond 3 years from the time a person other than the builder/contractor has become the owner.
- (c) The builder shall indicate on the warranty if an alternative building system or equipment design has been employed as provided in § 147.33 (relating to performance design alternatives).
- (d) If the person, builder or contractor is also the owner of the building at the time of construction, the warranty required under subsection (a) shall be provided at the time of its initial sale to a new owner. The warranty shall be in substantially the same form as provided in subsection (a).

#### § 147.8. Failure to provide warranty.

Whenever a person, builder or contractor fails to provide the warranty required by § 147.7 (relating to requirement of warranty), the required warranty shall constitute an implied warranty, and the owner's right to proceed may not be affected. If it is established by a preponderance of the evidence that the person's, builder's or contractor's failure to provide the warranty is willful, damages in twice the amount provided for in § 147.23 (relating to civil action—Use Group R-3) may be awarded.

#### SCOPE

§ 147.11. [Reserved].§ 147.12. [Reserved].§ 147.13. [Reserved].§ 147.14. [Reserved].§ 147.15. [Reserved].§ 147.16. Inspections.

The Department may perform a nondestructive inspection within 2 years of the date of completion of construction of a building constructed after January 15, 1983, to determine compliance with this title, as long as at least 30 days notice has been given to the owner. The costs of an inspection initiated by the Department will not be assessed on the owner. The Department may also cause an inspection to be performed at the request of the owner of a building subject to this title. The fee for an inspection—energy audit—requested by a home buyer under section 306(b) of the act (35 P. S. § 7201.306) and performed by the Department is \$35. The fee for all other inspections for Use Group R-3 buildings under section 311 of the act (35 P. S. § 7201.311) upon request of the owner or builder is \$100

or an amount determined by the Department to cover the costs incurred necessary to conduct the inspection.

## LOCAL GOVERNMENT ELECTION AND ENFORCEMENT AGENCIES

#### § 147.17. Local election—Use Group R-3.

(a) A local government of this Commonwealth may elect to administer the act and this chapter relating to the Use Group R-3 buildings, as defined in § 147.2 (relating to definitions), except for units subject to the Industrialized Housing Act (35 P. S. § § 1651.1—1651.12) or those units subject to the Housing and Community Development Act of 1974 (42 U.S.C.A. § § 5301—5320). The election shall be made by resolution of the governing body of the municipality which shall be in substantially the following form:

The (city, borough, town or township) of \_\_\_\_\_\_hereby elects to administer the provisions of the Act of December 15, 1980 (No. 222), as amended, known as the "Building Energy Conservation Act," for Use Group R-3 buildings as defined therein.

(b) A city of the First Class, Second Class and Second Class-A may elect to administer the act for buildings subject to this chapter except for units subject to the Industrialized Housing Act, or those units subject to the Housing and Community Development Act of 1974. The election shall be made by resolution on the governing body of the city, which shall be in substantially the following form:

The city of \_\_\_\_\_\_ hereby elects to administer the provisions of the Act of December 15, 1980 (No. 222), known as the "Building Energy Conservation Act."

#### § 147.18. Powers of local governments.

- (a) A municipality electing to administer the act or this chapter, as provided for in § 147.17 (relating to local election—Use Group R-3), shall exercise the same powers conferred upon the Department by the act or this chapter, including the power to institute proceedings for violations, with the exception of making modifications to the energy conservation standards contained in this chapter, or promulgating or adopting rules or regulations which are inconsistent with the standards provided for in § § 147.31—147.34a (relating to building energy conservation standards).
- (b) A municipality may exercise other administrative and enforcement procedures that it deems necessary to effect the purposes of the act or this chapter, including, but not limited to, prior plan approval, building permit requirements, use or occupancy permit requirements and inspections during the course of construction.

#### § 147.19. Local government variances.

A local government agency electing to administer § 147.17 (relating to local election—Use Group R-3), shall establish a board of variances to make determinations on requests for variance from the energy conservation standards contained in this chapter, with the approval of the Committee, and is authorized exclusive jurisdiction to grant the variance within 30 days of its filing. If the municipality does not establish a board of variances, the powers established by this section shall be exercised by the municipality's zoning hearing board, under the Pennsylvania Municipalities Planning Code (53 P. S. § § 10101—11202).

- (1) *Requests*. A request for a variance from the energy conservation standards contained in this chapter made to the local government board of variances shall be resolved and a decision on the request shall be made within 30 days of its filing.
- (2) Criteria. A variance shall be granted only if it is found that compliance with this chapter would result in extreme hardship to the owner, and the granting of the variance would not result in a significant increase in the energy usage of the building.
- (3) Condition. A variance shall only be granted if the criteria of this section have been satisfied.

#### § 147.20. Disposition of fines and fees.

Fines or fees collected under this chapter by a local government agency electing to administer this chapter under § 147.17 (relating to local election—Use Group R-3) shall be retained by the local government municipality.

#### § 147.21. Building permits.

- (a) A building permit issued by the Commonwealth or its local government shall have printed upon its face notice that it is necessary to comply with the act and this chapter.
- (b) Except where the local government elects to administer the act under § 147.17 (relating to local election—Use Group R-3) no local agency may withhold the issuance of a building permit or other similar permit, based on the owner's, builder's or contractor's inability to provide proof that a Notice of Intent to Construct form was filed.

#### § 147.22. Applicability of locally-enacted codes and ordinances.

The energy conservation standards contained in this chapter apply to new, additions to or renovations of Use Group R-3 structures. Use Group R-3 structures shall be deemed to comply with the requirements of building and related codes and ordinances enacted by local governments of this Commonwealth.

- (1) Except for the authority of the Department to promulgate rules or regulations for units subject to the Industrialized Housing Act (35 P. S. § § 1651.1—1651.12) if the standards invoked are equal to or more stringent than those contained in this chapter, or as mandated by Federal statute, no department, board, agency, commission or local government, other than as provided for in this chapter, may promulgate or adopt rules which are inconsistent with the energy conservation standards contained in this chapter except as mandated by Federal statute.
- (2) Nothing in the act or this chapter may be construed as amending, repealing or superseding a local zoning ordinance, subdivision regulation, designation of fire districts or a related land development code enacted by a local government of this Commonwealth.

#### § 147.23. Civil action—Use Group R-3.

- (a) The owner of a building subject to the requirements of § 147.3 (relating to requirement of certification—Notice of Intent to Construct) and § 147.7 (relating to requirement of warranty), who is aggrieved, as a result of the building not being properly designed or constructed under the act, shall have a right of action for breach of warranty. Remedies may include specific performance or an award of damages in an amount of not less than \$300. Attorney's fees shall be recoverable in an action in which the owner prevails. An award shall provide for payment of the actual costs in excess of \$35 incurred by the Department, if it inspected the building for the owner, and the owner shall remit the amount to the Department.
- (b) No action brought under subsection (a) may be maintained unless brought within 3 years from the date of the warranty.

#### **BUILDING ENERGY CONSERVATION STANDARDS**

#### § 147.31. Exemptions.

The following buildings are exempt from the conservation standards contained in this chapter:

- (1) Buildings whose peak energy use design rate is less than one watt (3.4 Btu) per square foot of floor area for all purposes.
- (2) Buildings subject to the Industrialized Housing Act (35 P. S. § § 1651.1—1651.12).
- (3) Buildings subject to Title VI of the The National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C.A. § § 5401—5426).
  - (4) Buildings which are neither heated nor cooled.

- (5) Buildings constructed primarily of tree logs.
- (6) Buildings which are designed to rely exclusively on nondepletable energy sources.
- (7) Historic buildings.

#### § 147.32. Minimum conservation standards—prescriptive requirements.

Except as provided in § 147.33 (relating to performance design alternatives), Use Group R-3 buildings and renovations shall be designed and constructed according to the following standards:

- (1) Infiltration control.
- (i) Cover plates for telephone, televisions and electrical receptacles and switches on exterior walls shall be provided with a gasket, or otherwise sealed against infiltration.
- (ii) Openings in the building envelope, such as foundation sill plates and band joists; windows and door jambs; access ways to unconditioned spaces; exterior corners; the top of interior walls on the uppermost floor; openings at the penetrations of electrical and plumbing utility services through the walls, floors and roofs; and similar openings in the building envelope, shall be caulked, gasketed, weatherstripped or otherwise sealed against infiltration.
- (iii) The air infiltration rate may not exceed 0.5 CFM per lineal foot of sash crack for windows, 0.5 CFM per square foot for sliding glass doors, nor 1.25 CFM per square foot for swinging doors. Compliance with the criteria for air leakage shall be determined by the manufacturer, using the *Standard Method of Test for Rate of Air Leakage through Exterior Windows, Curtain Walls and Doors*, at a pressure differential of 75 Pa. (1.57 lb/ft2), which is equivalent to the effect of 11.1 m/s (25 mph) wind. (ANSI/ASTM E 283-73).
  - (iv) Fireplaces shall be equipped with a damper.
- (v) Recessed light fixtures in ceilings that separate conditioned and unconditioned spaces shall be insulated. Nonzero clearance fixtures shall have a minimum 3 inch clearance between the fixture and insulation.
- (2) *Thermostatic controls*. At least one automatic or manual setback thermostatic control shall be provided for each heating system.
  - (3) Ductwork and pipes. Energy delivery duct work shall be insulated to at least R-5.
- (i) Duct installation, except where used to prevent condensation, is not required in the following cases:

- (A) Where the temperature differential between the interior of the ductwork and ambient is 25°F or less.
- (B) In one- or two-family dwellings which have insulated walls in basements/cellars and unventilated crawl spaces. Ductwork in those spaces is exempt.
- (C) When the heat gain or loss of the ducts, without insulation, will not increase the energy requirements of the building.
  - (D) Within HVAC equipment.
  - (E) Exhaust air ducts. See ASHRAE Standard 90-A-1980, § 5.11 Exceptions, p. 23.
  - (F) Ductwork located within the conditioned space.
- (ii) When low pressure supply air ducts are located outside of the conditioned space, transverse joints shall be sealed using duct tape. For fibrous glass board ductwork, pressure-sensitive tape may be used.
- (iii) Hot water and steam piping shall be thermally insulated to R-4, with the following exceptions:
  - (A) Piping installed within HVAC equipment.
- (B) When the heat loss or heat gain, or both, of the piping, without insulation, does not increase the energy requirements of the building.
- (C) In one- or two-family dwellings, piping located in unventilated crawl spaces and basements/cellars with insulated walls. Piping in those spaces is exempt. See ASHRAE Standard 90-A-1980, § 5.10 Exceptions, p. 22.
  - (4) Water heating.
  - (i) Requirements.
- (A) *Rule*. Except as otherwise provided in clause (B), service water heating requirements shall be met by stand-alone hot water heaters that are not part of a primary heating system. Gas and oil-fired storage water heaters having an input rate of 22Kw (75,000 Btu/hr) or less shall have a recovery efficiency of not less than 75%. See *ASHRAE Standard 90A-1980*, § 7.3.1.2, p. 33.
- (B) Exception. Excepted from clause (A) are systems with service/space heating boilers having a standby loss Btu/hr less than

where: pmd = probable maximum demand in gallons per hour; n = fraction of the year when the outdoor daily mean temperature is more than 64.9°F. See *ASHRAE Standard 90A-1980*, § 7.3.2.2, p. 33.

Standby loss is to be determined by the manufacturer for a test period of 24 hours duration while maintaining a boiler water temperature of 90°F above ambient.

- (ii) *Thermal resistance, standby loss.* Water heater tanks shall have a side wall thermal resistance of at least R-7. Alternatively, stand-alone water heaters shall have a standby loss no greater than:
- (A) Electric: Four watts per square foot of tank surface area. See *ASHRAE Standard* 90A-1980, § 7.3.1.1, p. 32.

(B) Fossil: 
$$S = 2.3 + \frac{67}{V}$$

S is percent per hour of stored thermal energy. V is rated volume in gallons. See *ASHRAE Standard 90A-1980*, § 7.3.1.2, p. 33.

When tested in accordance with § 430.221(e) of the DOE Water Heater Test Procedures.

- (5) Heating system sizing.
- (i) Output heating capacity per hour for fossil boilers and furnaces may not exceed 1.6 times the calculated heat loss per hour for the heating zone being serviced. Heat losses shall be calculated using the formula and local design temperatures for the nearest city listed in Appendix A, Table A.
- (ii) No heating equipment may be installed without prior load calculations being made to verify that the heating equipment is adequate for the dwelling in which it is being installed.
- (6) Minimum steady state efficiency for fossil furnaces and boilers. The minimum steady state efficiency of fossil furnaces and boilers shall be no less than 74%. See ASHRAE Standard 90A-1980, § 6.6.1.1, p. 26.
- (7) Minimum coefficient of performance for heat pumps. The minimum coefficient of performance (COP) of electric heat pumps shall be as included in the ASHRAE Standard 90A-1980, § 6.7. For the stated design conditions the minimum COP's are as follows:

Air Source Water Source

**Heat Source** 

Entering Temp. °C 8.3DB/6.1WB -8.3DB/-9.4WB 15.6

F 74DB/43WB 17DB/15WB 70

(8) Minimum thermal envelope requirements. The requirements relevant to the type of construction as shown in Appendix A, Table B—minimum conservation standards—thermal envelope.

#### § 147.33. Performance design alternatives.

- (a) This section may be used by builders as an alternative to the prescriptive designs of § 147.32 (relating to minimum conservation standards—prescriptive requirements).
- (b) Builders may design and construct Use Group R-3 buildings and renovations with alternative designs not listed in Appendix A, Table 1.
- (1) The energy consumption of the alternative design may not exceed that calculated for a building having similar construction features—that is, height, volume, orientation and the like—designed according to the requirements of Appendix A, Table B, and for fossil furnaces and boilers, based on minimum steady state efficiency of 74% in § 147.32(6) or, for heat pumps, based on a minimum COP as specified in § 147.32(7). The Modified Degree Day Procedure, the bin method as described in Chapter 28 of the ASHRAE Handbook of Fundamentals, 1985, a procedure as described in a workbook to be published by the Governor's Energy Council and the Department, or other procedures approved by the Department and the Committee may be used when calculating design energy consumption for performance design alternatives. The energy consumption of the alternative design may be computed by using the following equation:

$$U^{\circ} = \frac{U_1 A_1 + U_2 A_2 + U_3 A_3 + \dots + U_N A_N}{\Lambda^{\circ}}$$

Where:  $U^{\circ}$  = Overall thermal transmittance, the overall average heat transmission of a gross area of the exterior building envelope . Btu per hr. sq. ft. °F.

 $U_1$   $A_1$  = Thermal transmittance = the coefficient of heat transmittance applicable to the combination of different materials used in series along the heat flow path. Btu per hr. sq. ft. °F.

 $U_2 A_2 = U$  value times the area of the second path of heat transfer.

 $U_3 A_3 = U$  value of the windows times the area of the windows.

 $U_n A_n = U$  value of the nth path area of the nth path.

 $A^{\circ}$  = Total area.

The Home Energy Cost Estimator, published by the Governor's Energy Council (G.E.C. Misc. 1985), may be used to determine the cost effectiveness of the various design alternatives provided in this section. The Home Energy Cost Estimator may be obtained by contacting the Governor's Energy Council or the Department.

- (2) Tradeoffs under this subsection will be allowed within the ceiling, wall, floor and basement insulation levels; the window and door requirements, § 147.32(8); the furnace or boiler efficiency standard, § 147.32(6); and the heat pump COP standard, § 147.32(7).
- (c) [Reserved].
- (d) When a performance design alternative utilizes solar, geothermal, wind or other nondepletable energy source to meet part of its heating requirements, appropriate credit may be taken.

§ 147.34. [Reserved]. § 147.34a. Review.

This chapter will be reviewed annually and revised as need by the Department and the Committee.

§ 147.35. [Reserved].

#### **VARIANCES AND APPEALS**

#### § 147.41. Variances from this chapter.

- (a) Requests. Interested persons may request a variance from the requirements of this chapter. Requests shall be furnished to the Committee and the Governor's Energy Council with information pertaining to the request for a variance that the Committee deems necessary for an informed decision. A request for variances from energy conservation standards contained in this chapter shall be made to the Board of Variances of the Committee, and a decision on the request will be made within 30 days. A request shall be made in writing to the Governor's Energy Council, Post Office Box 8010, Harrisburg, Pennsylvania 17015.
- (b) Criteria. A variance shall be granted only if it is found that:
- (1) Compliance with this chapter would result in extreme hardship to the owner.
- (2) The granting of the variance would not result in a significant increase in the energy usage of the building.

#### § 147.42. Appeals.

- (a) The right to appeal decisions of the Department made under the act or this chapter, or both, exists as specifically provided by the act, and as authorized in 2 Pa.C.S. § § 501—508 and 701—704 (relating to practice and procedure of Commonwealth agencies and judicial review of Commonwealth agency action).
- (b) The appellant has discretion as to whether to utilize formal or informal proceedings under 1 Pa. Code Part II (relating to administrative rules of practice and procedure). At the option of the Department, formal proceedings may be adopted on a specific appeal.

#### **APPENDIX A**

To determine the maximum permissible heating capacity per hour of a heating system use the following formula:

Heating System Capacity =  $Q_L \times 1.6$ 

 $Q_L = design heat loss (Btu/hr)$ 

1.6 = oversizing factor

 $Q_L = U^{\circ} \times A \times TD$ 

U° = the overall coefficient of heat transmission for the envelope

(Btu/hr. ft.<sup>2</sup> °F)

A = area of the assembly (sq. ft.)

TD = The design temperature difference

Indoor Temperature minus Winter Design Temperature (from Table A)

## Table A Heating System Sizing Winter Design Temperature\*

Winter City Design

Temperature (F°)

Allentown

9

Altoona	5
Butler	6
Chambersburg	9
Erie	9
Harrisburg	11
Johnstown	2
Lancaster	8
Meadville	4
New Castle	7
Philadelphia	14
Pittsburgh (A.P.)	5
Pittsburgh (City)	7
Reading	13
Scranton/Wilkes-Barre	5
Sunbury	7
Uniontown	9
Warren	4
West Chester	13
Williamsport	7
York	12

Note: Where design temperatures for the building are available, they should be used instead of those listed in Table A.

\*Source: ASHRAE Handbook of Fundamentals, 1985 Ed.

# Table B Minimum Conservation Standards Thermal Requirements

Components

Minimum

Total

R-Values

(Footnote 1)

Exposed Ceiling	30
Windows and Glass Doors	1.6
(Footnote 2)	
Exterior Doors	4
Exterior Walls	16
Floors (A)	19
Floors (B)	11
Basement Walls (B)	10
Basement Walls (C)	10
Slab on Grade (Footnote 3)	6

*Note A:* Applies only to floors exposed to exterior design temperature.

Note B: In electrically heated homes, insulation is required in either floors over unheated basements or on basement walls. When the basement encloses a fossil-fueled boiler or furnace, insulation is required only on those basement walls whose above-grade exposures exceed 50% of their interior wall surface.

Note C: Exposed foundation walls—Insulation value of R-10 is required on exposed foundation walls, applicable to heated basements and crawl spaces, heated by design, whose above-grade exposure is greater than 50% of the interior wall surfaces. FOOTNOTES:

- 1. The R-values included in this table are applicable to the floor, wall or ceiling cavities, excluding framing members, and are equal to the total thermal resistance values of the building components totaled from inside air film to outside air film inclusive. In attaining these levels, it is allowable to round-up the total components' R-value to the nearest whole digit from values equal to or greater than 0.5 of the previous number.
- 2. Maximum Glazing Ration—Total glass area may not exceed 15% of the conditioned floor area.
- 3. Insulation is required over edge and 24 inches down and across. ]



May 23, 2006

Independent Regulatory Review Commission c/o Alvin Bush 14th Floor, Harristown II 333 Market Street Harrisburg, PA 17101

Dear Mr. Bush:

Pursuant to Section 5.1(c) of the Regulatory Review Act, enclosed for your review is a final omitted regulation. The regulation submitted would amend Chapter 147 of Title 12 of the Pennsylvania Code.

Also enclosed is a regulatory analysis form pertaining to the regulation.

Concurrently with delivery of the regulation to you, the regulation has also been submitted to the House Commerce Committee and the Senate Community and Economic Development Committee for their respective review in accordance with the Regulatory Review Act.

Sincerely,

Matthew J. Speicher Assistant Counsel

**Enclosures** 

cc: Ron Boston, Legislative Liaison

### TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO THE REGULATORY REVIEW ACT

LD. NUMBER: 4-86

SUBJECT: BUILDING ENERGY CONSERVATION STANDARDS

AGENCY: DEPARTMENT COMMUNITY & ECONOMIC DEVELOPMENT

TYPE OF REGULATION

Proposed Regulation

Final Regulation

X Final Regulation with Notice of Proposed Rulemaking Omitted

120-day Emergency Certification of the Attorney General

120-day Emergency Certification of the Governor

Delivery of Tolled Regulation

a. With Revisions

b.

Without Revisions

FILING OF REGULATION

DATE

**SIGNATURE** 

DESIGNATION

5/23/06 9. Aloyd

HOUSE COMMITTEE ON COMMERCE & ECONOMIC DEVELOPMENT

5/23/06 Brende Zablotaky

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SENATE COMMITTEE ON COMMUNITY & ECONOMIC DEVELOPMENT

563/06 I Selnet

INDEPENDENT REGULATORY REVIEW COMMISSION

5-23-06 Mary Mumment

ATTORNEY GENERAL (for Final Omitted only)

LEGISLATIVE REFERENCE BUREAU (for Proposed only)

May 19, 2006

to complete

### TRANSMITTAL SHEET FOR REGULATIONS SUBJECT TO THE REGULATORY REVIEW ACT

REGULATORY REVIEW ACT 4-86 I.D. NUMBER: SUBJECT: **BUILDING ENERGY CONSERVATION STANDARDS** AGENCY: DEPARTMENT COMMUNITY & ECONOMIC DEVELOPMENT TYPE OF REGULATION Proposed Regulation Final Regulation X Final Regulation with Notice of Proposed Rulemaking Omitted 120-day Emergency Certification of the Attorney General 120-day Emergency Certification of the Governor Delivery of Tolled Regulation With Revisions Without Revisions b. FILING OF REGULATION **SIGNATURE** DATE **DESIGNATION** HOUSE COMMITTEE ON COMMERCE & ECONOMIC DEVELOPMENT SENATE COMMITTEE ON COMMUNITY & ECONOMIC **DEVELOPMENT** INDEPENDENT REGULATORY REVIEW COMMISSION ATTORNEY GENERAL (for Final Omitted only)

LEGISLATIVE REFERENCE BUREAU (for Proposed only)