

LAWRENCE G. SPIELVOGEL, INC.

CONSULTING ENGINEERS

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May 28, 2003

Independent Regulatory Review Commission  
14th Floor  
333 Market Street  
Harrisburg, PA 17101

Re: Department of Labor and Industry ID Number 12-60

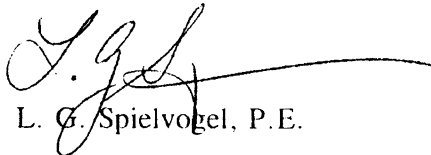
Gentlemen:

Enclosed please find my one page of comments on the Department of Labor and Industry (L&I) proposed rules for the Uniform Construction Code, I. D. 12-60. I also enclose a copy of my 21 page final comments to L&I in connection with their proposed rule from last September.

Also enclosed is an extra copy of this letter for time stamping showing receipt and a stamped self addressed envelope so it can be returned to me.

Very truly yours,

LAWRENCE G. SPIELVOGEL, INC.



L. G. Spielvogel, P.E.

LGS:jca

Enclosures

BY EMAIL AND FIRST CLASS MAIL

COMMENTS OF LAWRENCE G. SPIELVOGEL, PE  
ON PENNSYLVANIA L&I PROPOSED UCC IMPLEMENTATION  
May 28, 2003

My name is Larry Spielvogel, and I am an independent Registered Professional Engineer practicing in Pennsylvania, with offices in King of Prussia. Thus, I will be subject to these rules. I am commenting on my own behalf and at my own expense. I am not being supported or paid for these comments by anyone. For the last 30 years I have participated in building code development and adoption hearings, served on, commented on, and chaired the national committees that write, maintain, and revise the codes and standards used for buildings, including those being proposed for adoption in Pennsylvania. These comments are in response to the Preamble and Annex A posted on the L&I website on May 8, 2003. See [www.state.pa.us](http://www.state.pa.us), and type Uniform Construction Code in the Keyword window.

Paragraph 403.21 (e) (1) allows compliance by using "Pennsylvania's Alternative Residential Energy Provisions" (PHRC) dated February 2003 and published by the Pennsylvania Housing Research/Resource Center at Pennsylvania State University, as an alternative to the 2003 Codes of the International Code Council, including the International Energy Conservation Code (IECC).

PHRC is essentially identical to the December 2001 version, which made reference to the 2000 International Residential Code (IRC), except that the February 2003 version deletes all references to the year of the IRC. While it is clear that the 2001 PHRC version referred to and is based on the 2000 IRC and the 2000 IECC, the 2003 PHRC version has the identical requirements and references to the 2003 IRC. However, the energy-related requirements in the 2003 IRC and 2003 IECC are not identical to the 2000 IRC and IECC.

Every other code and standard referenced and adopted by L&I for the Uniform Construction Code in this rulemaking is consensus based, and has readily available procedures for proposing changes, conducting public hearings, and getting both formal and informal interpretations. None of these procedures and provisions are available for PHRC. No public notice was ever provided, nor were any public hearings held to receive public comment. Since it was and is not possible to comment or testify in the development of the PHRC, due process has been denied.

Most of the standards and references in the 2003 PHRC have since been superseded, revised, and updated. Yet, the requirements in the 2003 PHRC are based on the obsolete and out of print standards and references. Thus, in many instances, it is not possible to purchase products meeting the standards in PHRC, because manufacturers are testing and rating their products to the requirements in the current standards.

In the Preamble, L&I states that the US Department of Energy Pacific Northwest National Laboratory reviewed the PHRC. That statement is simply not true. What they did review was an early draft of the 2001 version. They did not review either the final 2001 version or the 2003 version. Thus, any of their comments or conclusions cannot be relied upon without their review of the final versions.

The provisions of PHRC are not as stringent or as energy efficient as the IRC or the IECC. Therefore, by allowing PHRC as an option, Pennsylvania will not be in compliance with the requirements of the 1992 Federal Energy Policy Act, and the subsequent Federal Regulations. Besides not complying with Federal Law, allowing the use of PHRC does a disservice to the citizens of Pennsylvania, and intentionally wastes our precious energy and money, compared with the provisions of the International Codes and Federal Law.

The trade-offs allowed by PHRC make a bad situation even worse. Besides encouraging additional energy waste, they preclude the use of the most energy efficient coal, oil, and propane heating equipment and even gas fired boilers.

The Department of L&I has not considered or responded to most of the substantive and technical comments on their August 2002 Proposed Rule submitted on September 19, 2002. A copy of those detailed comments on the August 2002 Proposed Rule is attached. The PHRC Alternative must be deleted from the UCC.

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COMMENTS OF LAWRENCE G. SPIELVOGEL, PE  
ON PENNSYLVANIA L&I PROPOSED UCC IMPLEMENTATION  
September 19, 2002

1. My name is Larry Spielvogel, and I am an independent Registered Professional Engineer practicing in Pennsylvania, with offices in King of Prussia. Thus, I will be subject to these rules. I am here on my own behalf and at my own expense. I am not being supported or paid for these comments by anyone. For the last 30 years I have participated in building code development and adoption hearings, served on, commented on, and chaired the national committees that write, maintain, and revise the codes and standards used for buildings, including those being proposed for adoption in Pennsylvania. These comments are in response to the page 4127 August 24, 2002 PA Bulletin notice.

### PROPOSED RULE

#### Introduction

2. In adopting the Uniform Construction Code (UCC or Code) for Pennsylvania, the Pennsylvania Department of Labor and Industry (Department or L&I) incorrectly assumes that the current successor code to the "1999 BOCA National Building Code" set forth in the statute is the First Printing of the 2000 International Building Code (IBC). The current successor is the 2000 IBC with the 2002 Supplement. The 2000 IBC was the first version of the IBC ever published, and the 2002 Supplement contains many corrections, clarifications, changes, updated references, and improvements.

3. In Paragraph 401.1 of the proposed rule, the Department does intentionally propose to adopt the errata to the Electrical and Accessibility Codes, and the supplement for IBC accessibility, but not for all other International Code Council (ICC) Codes. The 2001 and 2002 Supplements for all of the ICC Codes should be adopted.

4. The documents proposed for adoption and reference must be available for public viewing at locations around the State. With the short time allowed for comments and the public hearings, it is not possible for most people to get copies of the referenced publications in time for them to responsibly and thoroughly prepare testimony and written comments. The referenced documents and publications are probably not available for public viewing at any location other than L&I, and even that has not been publicized. More time should be allowed for public comment for such an important issue that affects so many citizens, local governments, and businesses in Pennsylvania.

5. Since there are many interested and affected parties who will have to learn the Code for the first time, it is important that they learn from the most up-to-date and most correct version available. The First Printing of the 2000 ICC Codes is not the most up-to-date or state-of-the art readily

available today. In later years when newer versions of these Codes are adopted, fewer changes will have to be made, and users can concentrate on implementing and enforcing the most current requirements. Therefore, the use of the 2000 ICC Codes now proposed by the Department directly contradicts the statement by the Department in the *Background* that requires state-of-the art techniques and cost-effectiveness.

6. By July 15, 2004, the Commonwealth of Pennsylvania is required to certify to the Secretary of the United States Department of Energy that their energy provisions for commercial buildings equal or exceed those set forth in the American Society of Heating, Refrigerating, and Air Conditioning Engineers and Illuminating Engineering Society of North America ANSI/ASHRAE/IESNA Standard 90.1-1999. See Docket EE-DET-02-001 on page 46464 in the July 15, 2002 Federal Register. If Pennsylvania were to adopt the 2001 or 2002 Supplement to the ICC Codes, they would likely be in compliance with Federal Statutes and Rules. The Codes now being proposed by the Department will not and do not comply with either the existing or proposed Federal Rules.

7. The proposal by the Department to use the 2000 International Energy Conservation Code (IECC), with its reference to the 1989 version of ANSI/ASHRAE/IESNA 90.1, will inhibit interstate commerce and will complicate and increase the cost of buildings built in Pennsylvania. Adopting the 2000 IECC is contrary to the provisions of Section 102 (b) of Act 45, which encourages standardization and economy in construction that is consistent with nationally recognized standards. It will also result in higher energy use and less economically efficient buildings in Pennsylvania than those being built in neighboring states. This will put Pennsylvania businesses at a competitive disadvantage compared to those in neighboring states. Also, see the extensive comments in paragraphs 124 to 140 below on the 2000 IECC.

8. Both New York and New Jersey are now using and enforcing energy codes that use ANSI/ASHRAE/IESNA Standard 90.1-1999, which is specifically referenced in the 2001 and 2002 Supplements to the ICC Codes. Thus, designers, owners, and contractors who also work in those other states will be forced to use the out-of-date, obsolete, and a superseded version of the building energy code just now being proposed by the Department for Pennsylvania.

9. In the preamble, emphasis is place on the extensive outreach by the Department. They claimed to have communicated with interested groups and stakeholders and got their input and suggestions. However, from the comments below and those at the public hearings, it is clear that considerably more outreach, communication, and suggestions must be sought to make this proposed rule complete, correct, usable, and enforceable.

10. It will be necessary to revise or repeal 52 PA Code Section 69.101 et seq., which contains regulations that utilities must follow before starting service. This must be coordinated with Paragraphs 403.47 and 403.65 in the proposal.

11. Public comments received electronically should be posted on the L&I website for all to see, like other agencies do.

### Definitions

12. In Paragraph 401.1 of the proposed rule, the Department proposes to use the U. S. Department of Energy (DOE) COMcheckEZ software to determine compliance with IECC for commercial buildings as they are defined in the L&I proposal. However, COMcheckEZ is not capable of determining compliance with all buildings designed under the provisions of Chapters 7 and 8 of the 2000 IECC. Thus, a user of Chapters 7 or 8 cannot follow these requirements of the Department. Provide a means for users of Chapters 7 and 8 to show or prove compliance.

13. The definition requires the use of COMcheckEZ Version 2.1, dated April 2000. Version 2.1 was superseded and abandoned a long time ago. A new Version 2.4, which corrects many bugs, errors, and inconsistencies is now available and in use. However, Version 2.1 was not even available any longer on the DOE website. Since Version 2.1 is required by L&I, I made a special request to the Department of Energy to restore Version 2.1 to their website, which has now been done, with its known bugs and errors. However, the latest version of COMcheckEZ should be used in the definitions.

14. In 401.1, the Department proposes to use the DOE MECcheck software to determine compliance with IECC for residential buildings. However, MECcheck is not capable of determining compliance with buildings designed under the provisions of the Pennsylvania Housing Research Center (PHRC) Alternative or the ICC International Residential Code (IRC). Thus, a user of the PHRC Alternative or the IRC cannot use the DOE compliance guide. Provide means for demonstrating compliance for the energy provisions of both IRC and PHRC.

15. The April 2000 Version 3.2 of MECcheck shown in 401.1 of the proposal does not exist. In April 2000, the latest version available was 3.0. A situation similar to COMcheck exists for MECcheck. The latest published version 3.2, dated January 2001, should be referenced.

16. Since neither of the L&I required versions of COMcheckEZ or MECcheck were available, it was not possible to use and verify that they met and matched the other requirements in the L&I proposed rules. The public must be given the opportunity to get, use, and comment on the specific criteria for compliance with the L&I proposal.

17. In 401.1 the definitions of commercial and residential buildings must be expanded to show which definition applies to (1) high rise residential, (2) low rise multifamily residential, (3) convents, (4) monasteries, (5) rectories, (6) fraternities and sororities, and (7) rooming houses. The current definition for residential building does not include these. These building types are not covered by the IRC or by the provisions for commercial buildings in IECC. Therefore, you must provide comprehensive definitions and energy conservation provisions for these building types, as is done comprehensively in the ICC Codes.

### Standards

18. In Paragraph 403.21 (e) (1), the Department proposes to allow the optional use of the Pennsylvania Housing Research Center (PHRC) Alternative to Chapter 11. Please see the extensive discussion in paragraphs 45 to 123 in the separate section below on the PHRC Alternative. Also, the proposal does not say which Chapter 11 the PHRC can be the alternative for. No evidence or

documentation has been presented or referenced to show that PHRC is equal to or more stringent than Chapter 11 of IRC. The opposite is true, as shown by the extensive comments below in paragraphs 45 to 123. The option for the PHRC Alternative must be dropped, since it will result in higher energy use if followed, contrary to the unsupported statements on page 4129 of the Pennsylvania Bulletin.

19. The PHRC Alternative should not be included in the section on Standards, since it is not a standard.

20. In 403.21 (e) (2), COMcheckEZ is not capable of determining compliance for low rise residential buildings such as garden apartments, townhouses, and apartment buildings. Simplified or computerized prescriptive means such as MECcheck must be specifically referenced and provided for demonstrating compliance for these building types, like those for all other building types.

21. There are differences between 403.21 (a) and 403.26 (a) (2). The ICC Electrical Code and the International Electrical Code are the same. However, there may be a copyright or trademark dispute over the title of the latter. Correct the titles.

22. Also, 403.21 lists ten Codes, while 403.26 lists only five Codes. This is confusing and contradictory, and should be made consistent.

23. In 403.26 (d), it is necessary to specifically describe all those provisions of the International Mechanical Code (IMC) that are not being adopted and that are superseded by the Law. The provisions of the Law must be set forth in conjunction with the adoption of the Codes. Otherwise, how are designers, contractors, and code officials to know which provisions of IMC do and do not apply?

#### Permit and Inspection Process for Commercial Construction

24. The provisions of 403.41 are called a subchapter, while the almost identical provisions in 403.61 are called a section. Since both deal with the permit and inspection process, they should be called the same thing. Otherwise, the Uniform Construction Code is not uniform.

25. In 403.42 there are many requirements for permit applications that apply to the construction of new buildings. However, those same requirements also apply to permit applications for renovations and repairs, even though most of those requirements are not relevant or needed in connection with covered renovations and repairs. For example, information about the site and parking that will not change or be impacted by the work described in the permit application should not have to be provided. This requirement will impose a very substantial and unnecessary burden on those building owners who wish to make investments and improvements in their buildings. Clarify the permit application requirements.

26. In 403.42 (b) there is no reason why L&I or the municipality cannot provide the application forms, since the forms must be submitted to them. There is no statutory or regulatory reason why the applicant for a permit must go to the Department of Community and Economic Development for forms that must be submitted to another agency. It is reasonable to have the forms available from the agency that will issue the permit.

27. In 403.42 (g), the Department is not requiring that design documents stamped by a Pennsylvania licensed design professional be prepared for commercial and multifamily construction, repair, and renovation, when there are no additions or changes to the structure or egress to get a permit. This endangers the public health and safety, since there are many other changes, repairs, and replacements that require licensed professionals to be involved. Require stamped design documents for commercial and multifamily construction, repair, and renovation.

28. It is often not possible to know if or when there has been explicit compensation for the design documents, which could be included as a "no cost" item in a large construction contract or agreement. As a practical matter, there is always compensation for the preparation of design documents, which may not necessarily be itemized or charged for separately. Drop the provision about no compensation.

29. With the public health and safety at risk, it does not matter whether there has been compensation or not for the design documents. When the design documents have resulted in, caused, or contributed to injury or damages, the entity or person preparing those documents must be held accountable. Pennsylvania Laws and Regulations governing the practices of architecture and engineering control who can prepare construction documents. Those Laws cannot be altered by this rulemaking.

30. In 403.42 (h) there is no definition or description of what "special circumstances" consist of. Unless the terms can be precisely defined or described, they should not be used in rulemaking. The applicant can always request a variance, if justified.

31. In 403.42 (j) it does not say who approves the fire protection shop drawings. The rule must state either the code official or the licensed design professional, or both.

32. In 403.44 (b) add the phrase "Design or" at the beginning of the paragraph.

33. In 403.45 inspections are required for energy conservation in commercial buildings, but inspections for energy conservation in residential buildings in 403.63 are not required. Since the energy intensity of residential buildings tends to be higher than the energy intensity for most commercial buildings, for similar purposes, this omission does not make sense, is not in the public interest, and discriminates in favor of residential buildings. Residential buildings should be inspected for energy conservation, especially since more options for compliance exist and many energy conservation features are hidden upon completion of construction.

34. In 403.48 it is not clear which Chapter 3 is being referenced. Is it Chapter 3 of the IBC, IMC, the International Plumbing Code (IPC), or some other document?

#### Permit and Inspection Process for Residential Buildings

35. Many of the provisions for commercial buildings in 403.41 through 403.47 should apply equally to residential buildings in 403.61 through 403.65, but are not required for residential buildings by the Department. The public health and safety in residential buildings are every bit as important as they are in commercial buildings. The current proposal for residential buildings also does not include the requirement for preparation of construction documents by licensed design professionals, thus making it even more important to have provisions to insure that the permit application and

construction work comply in every respect with the UCC.

36. For example, in 403.42 (d) (2) for repairs to commercial buildings, "The removal or cutting of any structural beam or load-bearing support" requires a permit, while the identical repairs to residential buildings do not require a permit. The public health and safety risks are the same or greater in residential buildings, yet the proposal by the Department is silent on whether a permit is required for this common type of repair in residential buildings. Require permits for repairs to residential buildings for the same types of repairs that require permits in commercial construction.

37. In 403.61 through 403.65 there is no reference or requirement for the use of boilers and unfired pressure vessels, like there is in 403.48 for commercial buildings. Boilers and unfired pressure vessels of the same types and sizes used in commercial buildings are also used in residential buildings. Therefore, the provisions of 403.48 should be also included for residential buildings.

38. In 403.62 there is no requirement for construction documents to be submitted with a permit application. Thus, it is not possible for the code official to determine compliance with the Codes and protection of the public health and safety. Complete and detailed construction documents must be submitted with permit applications for residential buildings, so the code official can determine compliance with all aspects of the Codes. By not adopting the provisions of Chapter one of the IBC, essential provisions such as these have been omitted, to the detriment of code officials and the public. Construction documents should be submitted for residential buildings with the application for a building permit.

39. In 403.62 the permit applicant should be required to designate which energy options are being selected on the building permit application, so the code officials and later owners will know what options were used and what they can expect to find in the building. Require irrevocable election of energy options on the building permit application.

40. In 403.63 (d) there is no inspection requirement for energy conservation, even though many required elements are enclosed and covered during construction, and cannot be reasonably inspected upon completion. It is not reasonable to expect the code official to be able to properly prepare the final inspection report required by 403.63 (f) (5) unless inspections are conducted during construction and inspection reports filed by the code official. Inspection for energy conservation is required for commercial buildings, and must also be required for residential buildings.

41. In 403.63 (h) (which was mislabeled as f) and in many other locations in the proposal by the Department it is not reasonable or necessary for the code official (or third party agencies) to send copies of anything to anyone other than the permit applicant or permit owner and any other government officials and agencies required by Law or rule. The permit applicant or permit owner is perfectly capable of and should be responsible for distributing copies of documents sent by the code official. For example, the owner often pays for the construction, and there is no lender, so requiring that copies be sent to the lender is superfluous. In many other cases, the property owner is the builder, who is often the permit applicant. In other cases, the owner or lender change during construction. Code officials and third party agencies should not have to keep track of or communicate with anyone other than the permit applicant or permit owner.



### Department, Municipal, and Third-Party Enforcement for Noncompliance

42. In 403.85 and 403.101, the building code official should maintain copies of residential construction documents, just the same as for commercial construction documents and for the same reasons. Subsequent residential owners and building and fire safety officials can have just as much need for these documents as for commercial buildings.

### Board of Appeals

43. Minimum requirements for qualifications for members of appeals boards in 403.121 must be set forth to adequately protect the health and safety of the public.

### Department Enforcement

44. In 403.141 local governments, fire, and emergency units must have the ability to review and comment on plans for State-owned buildings, if the State expects these units to respond promptly and efficiently in time of need.

### **PHRC ALTERNATIVE TO CHAPTER 11 (PHRC)**

45. In the notice of public hearings on page 4210 of the August 24, 2002 Pennsylvania Bulletin, it says the Department intends to use the energy requirements of the International Residential Code (IRC) as one means for determining compliance. However, the United States Department of Energy (DOE) has not determined and does not intend to determine that the energy provisions in the IRC comport with or equal or exceed the requirements in the 2000 International Energy Conservation Code (IECC).

46. Further, the Department has defined only a very limited subset of residential buildings that can use either the IRC or the PHRC. Thus, the Department is segregating only some types of residential buildings for preferred treatment. Then there is the even more dubious question of whether PHRC equals or exceeds the minimum energy requirements set forth in the DOE rules in the Code of Federal Regulations (CFR).

47. As the Department is certainly learning, writing or adopting a building or energy code can be a daunting task. Having long experience developing, writing, administering, and using codes is an important requirement, especially when writing a new set of requirements. I could not find any other building or energy codes, or portions thereof, developed, written, or administered by PHRC, or any staff members, in Pennsylvania, or anywhere else. Nor is there any evidence that PHRC or its staff has ever regularly served on or participated in the national codes or standards committees or development process.

48. If the Department allowed the Pennsylvania Builders Association to sponsor the development and adoption of the PHRC alternative, so too should any other trade association or organization be allowed to sponsor the development and adoption of alternatives. The UCC should make provisions for these alternatives to be considered and adopted, but only after the due process of public review and comment.

49. The preamble on page 4129 says, "New residential construction in this Commonwealth will meet the window glazing requirements of the 'International Code 2000,' in the aggregate." However, no assumptions, analyses, or details are provided to allow independent confirmation of that conclusion. Since both IRC and IECC have limits on the amount of glazing, and PHRC does not, there is serious doubt that this statement can be supported.

50. My requests to the Department and PHRC for copies of the supporting analyses and documentation or for publication of that material on the L&I website or in the Pennsylvania Bulletin have gone unanswered.

51. There are no references in PHRC, so it is not possible to determine the source of the information presented. The technical and economic basis for the requirements in PHRC is not shown or described, nor can they be independently verified. Thus, it is not possible to check PHRC for errors and inconsistencies in the requirements.

52. While MECcheck software from DOE can be used to evaluate and determine compliance with IECC, it cannot be used to evaluate or determine compliance with PHRC. There is no indication that any software for PHRC is being prepared or will be available. Thus, homeowners, designers, builders, and code officials will not be able to use MECcheck or any other software to determine compliance with PHRC.

53. I am inclined to believe that the assumptions that were made favored the conclusions that were reached, without the opportunity for critical review or comment, or the possibility that another reasonable set of assumptions would have reached a different, less favorable conclusion. I also suspect that the basis for the conclusion was developed by PHRC, without competent responsible independent unbiased peer review. The statement in the preamble also does not say which specific International Code requirements are supposed to be met.

54. The statement on page 4129 that "This alternative...will yield overall energy savings similar to the savings that would be obtained by using other prescriptive methods" does not say that PHRC will equal or exceed the minimum requirements in IECC 2000, as required by DOE in the CFR, or that PHRC will equal or exceed the minimum requirements in IRC. Nor is there any reference or analysis to support that statement. "Similar to" does not necessarily mean "equal to."

55. The citation on page 4210 to the operative Federal Law is not correct. The proper citation is the Energy Policy Act of 1992, 42 USCA 6833.

56. The Federal Law also requires that any building energy code be "developed and updated through a consensus process among interested persons..." which was not done for the PHRC Alternative. Therefore, the PHRC Alternative does not meet the requirements of the Federal Law.

57. The justification for PHRC is also stated on the same page as "Residential builders will not be required to calculate the window-to-wall ratio in new home construction." Giving up energy conservation because builders can't do ten minutes of fifth grade arithmetic for a new house does not support or justify PHRC. Most builders throughout the United States follow the requirements of IECC and/or IRC every day. Not wanting to or being able to do simple arithmetic is not a good reason for builders in Pennsylvania to avoid following the exact same Codes that builders in most states across

the country follow every day.

58. On page 4129 it says that the U. S. Department of Energy Pacific Northwest National Laboratory (PNNL) "found that the PHRC alternative had slightly more stringent standards for some building designs and slightly less stringent standards for other buildings." The PNNL report number PNNL-13439, dated February 2001 looked at an early draft version of PHRC, and not the final version proposed here for adoption. Some quotes from the PNNL report say:

"If equivalency must be achieved on a house-by-house basis, then the PHRC proposal should be rejected because it clearly falls short of the IECC for some house designs."

"Does every new house have to use equal or less energy than would result from compliance with the IECC?" "If the answer to this question is yes, then the PHRC proposal clearly does not comply with the IECC."

"If builders use this compliance path this way, (when less stringent than IECC) the IECC plus the PHRC alternative would not meet the IECC on a statewide average."

"The PHRC proposal does not ensure that houses will be built with a reasonably good level of energy efficiency."

59. The PHRC Alternative and options apply to the IRC. However, the IECC applies to all covered buildings, including residential. Thus, the PHRC options do not comply with the minimum requirements of the IECC, nor do they comply with the minimum requirements of the Federal Rules adopted in the CFR under the 1992 Federal Energy Policy Act, 42 USCA 6833.

60. Every other code or standard proposed for adoption or reference by the Department have regular and routine provisions and means for the public to get interpretations, to review, propose changes, comment on proposals by others, and appeal to higher authority. There are no means available to the public for updating, interpreting, changing, challenging, or appealing the PHRC Alternative. Therefore, PHRC is not comparable to the ICC Codes or other standards, which provide the public with the opportunity and ability to propose changes and deletions, and to appeal the content and requirements before they are adopted and enforced. There are also no provisions for interpretations by the PHRC developer after adoption, such as those available from ICC. The Department has usurped the ability of the public to ever have any opportunity to change the PHRC document, or even to correct obvious errors and inconsistencies. The public has been denied due process.

61. Even the ICC has a requirement, with good reason, that they will not reference another standard unless it achieves consensus, and follows ANSI procedures for balance of interests, openness, and due process. The National Fire Protection Association (NFPA) has almost the same requirement. The PHRC Alternative would never even be considered for adoption or reference by ICC or NFPA or any other responsible code writing body. PHRC does not provide any balance of interests, openness, or due process in the development of their Alternative. The Department must reject and completely delete the PHRC Alternative on these grounds alone.

62. It is not possible to independently verify the analyses and conclusions used in the PHRC.

While there may be some obscure PHRC reports and studies, they have not been subjected to peer or public review like those in IRC, IECC, and ANSI/ASHRAE/IESNA Standard 90.1 that serve as the basis for the requirements in the ICC Codes. The technical basis used by PHRC has not been published in any authoritative technical journal or presented at a recognized peer reviewed symposium. Therefore, due process was not provided for PHRC.

#### Code for the Conservation of Space Conditioning Energy for Housing in Pennsylvania (PHRC)

63. Despite the unsupported claim to the contrary in the Preface, the minimum requirements for energy conservation in residential buildings in PHRC do not equal or exceed those in either IRC or IECC 2000. The detailed reasons follow.

#### Scope and Compliance

64. The alternative compliance described in Paragraph 1101.5 of PHRC does not have enough detail and information to permit technically accurate and correct alternatives to be demonstrated. For example, overall performance is not defined or described. Does that mean performance for heating, cooling, or both? The PHRC requirement is less stringent than both IRC and IECC.

65. In fact, there are no definitions for any of the terms in the entire document. Without precise definitions it is not possible to determine compliance. For example, what is a mass wall? The PHRC requirement is less stringent than both IRC and IECC.

#### General Considerations

66. In 1102.3 there are requirements for certifications by installers. Only permit applicants and/or owners are responsible to the code official for compliance. If certifications are to be required, they must be made by or through the permit applicant and/or the owner, and should be in writing, signed and dated, to be enforceable.

67. In 1102.3 there are no requirements for markers every 300 square feet showing blown or sprayed insulation thickness for compliance, as are required by both the IRC and IECC. The PHRC requirement is less stringent than both IRC and IECC.

68. In 1102.4.1, compliance with the National Fenestration Rating Council (NFRC) Standard 100 is required. Please see the discussion about NFRC Standards below under IECC 2000. The U factor values for fenestration (glazing and/or windows) in PHRC, IRC, and IECC are based on the methods in NFRC 100-97. Products in the marketplace are no longer rated to that Standard and to the criteria in that Standard. Thus, it will not be possible to buy and install complying fenestration unless separate tests are paid for and conducted using the 1997 Standard.

69. The default U factors in 1102.4.1.1 and Tables 1102.1 (a) and 1102.1 (b) are no longer current for the same reasons.

#### Building Thermal Envelope

70. Both the IECC and IRC have glazing area limits when using the minimum requirements for

envelope components using the simplified method of compliance. For one and two family houses the limit is 15% glass, and in townhouses it is 25% glass. If those limits are exceeded, more stringent envelope requirements are required. In IRC, if those limits are exceeded, the IECC requirements must be met. In IECC, if those limits are exceeded, the simplified methods can no longer be used, and either the component performance method or the systems analysis method must be used.

71. Even with the component performance method in IECC the glazing limits are 25% and 30%. However, PHRC has no limits on glazing area when using the minimum envelope requirements. Thus, PHRC allows a 100% glass house to comply. This provision alone disqualifies PHRC from even coming close to equaling the IRC or IECC. The PHRC requirement is less stringent than both IRC and IECC.

72. In 1103.1.1 of PHRC the heat transmission requirements are set forth in Table 1103.1, with separate requirements for one and two family houses and for townhouses. The requirements for one and two family houses are similar to, but not the same as the requirements in IRC and IECC. However, the requirements for townhouses are considerably less stringent than those in IRC and IECC. The requirements for townhouses should at least be the same as those for one and two family houses, just like they are in IRC and IECC. The PHRC requirement is less stringent than both IRC and IECC.

73. The same is true for steel framed walls in 1103.2.4. The PHRC requirement is less stringent than both IRC and IECC.

74. In Exception 1 to 1103.2.1, insulation in walls exposed to unconditioned areas can be reduced to R-13, which is not allowed in either IRC or IECC. Thus, PHRC is less stringent than IRC or IECC.

75. In 1103.2.8 the insulating materials "shall be protected" without any means or methods described or required. The same provision in IECC requires "a rigid, opaque and weather resistant protective covering." The PHRC requirement is less stringent than IECC.

76. In 1103.3, the maximum U factor allowed is 0.39, while the maximum allowed by IRC and IECC is a 0.35 U factor. The PHRC requirement is less stringent than both IRC and IECC.

77. In Tables 1103.3.1 and 1103.3.2 there are many requirements for insulation R-values for which there are no products available in the marketplace. For example, it is not possible to buy R-6.5 insulation board. Insulation products required by the UCC should be readily available in the marketplace.

78. In 1103.4 a reduction to R-30 from R-38 or R-49 is allowed for cathedral ceilings, while not allowed in both IRC and IECC. The PHRC requirement is less stringent than both IRC and IECC.

79. In 1103.5.1, the insulation requirements for floors over a non conditioned space are considerably lower and not nearly the same as in IRC and IECC. The PHRC requirements are much less stringent than both IRC and IECC.

80. For floors with other than wood structural members, the manufacturer's instructions must be

followed, even if they have none. The PHRC requirements are much less stringent than both IRC and IECC.

81. In the exception to 1103.6, up to 4 square feet of glazing can be exempted from the minimum requirements. In both IRC and IECC only up to 1 percent of glazing can be exempted. Thus, in most cases, the PHRC requirement is less stringent than both IRC and IECC.

#### Trade-offs

82. In 1103.7, tradeoffs are allowed for air infiltration and high efficiency equipment. Thus, in addition to users of the UCC having the ability to use PHRC instead of the comparable provisions in IRC or IECC, there are further options available in 1103.7.

83. In 1103.7.1, the ASTM E 779-87 Standard is discontinued and no longer available. Thus, it is not possible to determine compliance to be able to use this tradeoff.

84. If the low air infiltration tradeoff in 1103.7.1 is selected, and the blower door test shows less than 0.35 air changes due to infiltration, the applicant is then allowed to substantially reduce the energy conservation of the windows and walls, or foundations. The window U factors can be increased by 16 to 20%, and the wall insulation requirements can be reduced by 7 to 11%. Neither IRC nor IECC has any comparable provisions for whole house air infiltration or for reductions in window, wall, or foundation thermal requirements. The PHRC requirements are much less stringent than both IRC and IECC.

85. I understand that Federal Law preempts any other efficiency standards for covered equipment, so states cannot set higher efficiencies than those in NAECA for covered equipment without a specific exemption from the Secretary of DOE. Thus, Pennsylvania may be in violation of Federal Law by setting the requirements in Table 1103.6.

86. If the high efficiency equipment tradeoff in 1103.7.2 and Table 1103.6 is selected, the applicant is then allowed to substantially reduce the energy conservation of the windows and walls, or foundations, or basements. Thus, the window U factors can be increased by 16 to 20%, and the wall insulation requirements can be reduced by 7 to 11%. Neither IRC nor IECC has any comparable provisions for high efficiency equipment or for reductions in window, wall, or foundation thermal requirements. The PHRC requirements are much less stringent than both IRC and IECC. This option in PHRC encourages wasting large quantities of energy efficiently with high efficiency equipment.

87. In Table 1103.6, there are no tests or measurement standards included or referenced, against which the efficiency requirements are to be measured. Thus, a manufacturer or contractor could use any set of criteria they wanted to meet these efficiency requirements. Without providing industry standards in this Table, the efficiency requirements are not meaningful.

88. If the option of using Table 1103.6 is chosen with a gas or oil furnace or boiler, there is no minimum cooling efficiency required. Thus, it is possible to use air conditioning equipment with the lowest possible efficiency and still comply. This is hardly the "High Efficiency Equipment Trade-off" that the title of the Table implies.

89. Table 1103.6 discriminates against certain types of fuels and heating systems. By requiring gas and oil fired furnaces and boilers to have 90% AFUE, tilts the fuel and heating system selection toward gas furnaces. However, gas is not available at all locations in Pennsylvania, so other fuels must be used.

90. Gas furnaces at 90% AFUE are readily available at reasonable premium prices. However, gas boilers and oil furnaces and boilers at 90% AFUE are scarce and have significantly higher prices. There are no gas steam boilers available in the marketplace that will meet the 90% AFUE requirement.

91. Only one Pennsylvania gas boiler manufacturer is even able to offer boilers that qualify. All other Pennsylvania gas boiler manufacturers cannot. Few gas boilers made anywhere, except foreign imports, can meet the required AFUE.

92. There are many gas boilers with AFUE's in the mid to upper 80's available, but that will likely not be used due to their higher prices, and the lowest price lowest efficiency boilers available will be selected. Thus, this provision will tend to discourage the use of gas boilers with efficiencies close to the 90% AFUE required by this option. That does not make common sense.

93. The situation for oil boilers is even worse. Oil boilers meeting the 90% AFUE requirement are only available in two capacities from only one manufacturer. No other boiler manufacturer anywhere in the country makes oil boilers, either hot water or steam, of any capacity with AFUE of 90% or higher. Thus, a house with a requirement for more or less capacity will not be able to get a qualifying oil boiler from any manufacturer.

94. The situation for oil furnaces is impossible. There are not any oil furnaces on the market that meet the minimum requirement to qualify for this option.

95. Many Pennsylvania houses are heated with propane. Yet, those houses will never be able to qualify for this option, since propane furnaces and boilers are not allowed.

96. In the Note for Table 1103.6, it is possible to average the efficiencies of gas furnaces or heat pumps, but not gas or oil boilers or oil furnaces or conventional air conditioners. This is discriminatory and does not even make common sense.

97. Worse still, just the ratings of the equipment in the marketplace will allow lesser efficient equipment to be used, when it would not ordinarily be used. To meet the requirements of any minimum standard with the capacity required, it is usually necessary to select equipment with ratings that are above the minimums, because equipment with ratings exactly matching the minimums is often not made or available. By allowing the averaging, the permit applicant can offset the premium cost of the units that exceed the minimum by using units that are below the minimum required efficiency.

98. The averaging allowed in Table 1103.6 is also not fair or equitable, since it does not consider the size or capacity of the units being averaged. For example, if there are 10 units that are required to meet a SEER of 12, then five of those units could be SEER 14 and five could be SEER 10. However, the five at SEER 14 could be one ton units, and the five at SEER 10 could be five ton units. But the weighted or overall average SEER of all ten units would be below the minimum required.

Thus, what may have been well intentioned can be easily and readily be subverted.

99. The tradeoff provision ignores other types of high efficiency HVAC equipment that should be encouraged and allowed for tradeoffs. Geothermal and ground source heat pumps are examples that should be included, since they are far more energy efficient than the equipment in Table 1103.6. High efficiency water heaters and solar water heaters are also readily available. With well insulated and tight houses, the energy used for water heating can equal or exceed that used for space heating. By not including these more efficient types of equipment, you are further and intentionally discouraging their use, since there are no benefits or tradeoffs available. Therefore, the tradeoff provision deliberately puts some of the most efficient HVAC and water heating equipment that should be encouraged, at a distinct disadvantage.

100. There is a good chance that DOE may soon adopt mandatory higher minimum energy efficiency standards for HVAC equipment that could equal or exceed those in Table 1103.6. When and if that happens, builders will automatically have to comply. Thus, the option to reduce the performance of windows and walls, or foundations will be a giveaway, and become the new lower minimum standard to meet. Do not allow that to happen.

101. Therefore, the PHRC tradeoff provisions must be deleted or completely revised, since they do not provide equivalent or better energy efficiency than even the other minimum requirements in PHRC, much less the minimum requirements of either IRC or IECC.

#### Service Systems

102. In 1104.1 of PHRC, any equipment covered by the National Appliance Energy Conservation Act (NAECA) under Federal Law is acceptable. However, there are other types of equipment not covered by NAECA that are used in residential construction. Some examples of equipment not covered by NAECA are duct furnaces, large oil, gas, and propane fired boilers and furnaces, three phase air conditioning units and heat pumps, packaged terminal air conditioners, and ground and water source heat pumps. In IRC and IECC 2000, these other types of equipment must meet the minimum requirements of the ASHRAE/IES Energy Code. But in PHRC there are no requirements whatsoever. The PHRC requirement is less stringent than both IRC and IECC.

103. There are also some types and sizes of water heating systems that are not covered by NAECA, but that are covered in IRC and IECC. Thus, anyone who opts to use PHRC can avoid meeting minimum efficiency requirements for some types and sizes of electric water heaters, all types of instantaneous water heaters, and all types of pool heaters. The PHRC requirement is less stringent than both IRC and IECC.

104. Where hot water is stored in an unfired tank, such as with gas or oil or propane boilers with summer-winter hookups, there are no requirements for insulating the tanks, as in IRC and IECC. These are also becoming more common, with increasing use of radiant heating systems. The PHRC requirement is less stringent than both IRC and IECC.

105. In 1104 there are no provisions for properly determining the size of the HVAC systems, as in IECC. As a result, it is likely that most HVAC systems will be oversized, and therefore operate less efficiently and more wastefully than properly sized equipment required by IECC. The PHRC



requirement is less stringent than IECC.

106. In 1104 there are no provisions for swimming pool heater and pump controls and pool covers, as in IECC. The PHRC requirement is less stringent than IECC.

107. In 1104 there are no provisions for shower water flow limits or for heat traps on water heaters, as in IECC. The PHRC requirement is less stringent than IECC.

108. In 1104 there are no provisions or requirements for electric metering or for efficient lighting, as in IECC. The PHRC requirement is less stringent than IECC.

109. In 1104.2 there are no provisions for the range of temperature settings and deadbands on thermostats, as in IECC. Thus, homeowners can be restricted in how high or low they can set their thermostats when heating or cooling is not needed, and how far apart the heating and cooling settings can be. Not requiring and having these capabilities will restrict the ability of homeowners to conserve heating and cooling energy. The PHRC requirement is less stringent than IECC.

110. Strictly following the requirements of 1104.2 will prevent heat pumps from operating electric heat during the defrost cycles, which will usually occur when the heating load can be met by the heat pump alone. This will cause frequent complaints and great discomfort in the house, as the heat pump will supply very cold air to the house when heat is required, commonly when the outdoor temperature is around freezing. While it is possible to accomplish this requirement, builders will likely not install heat pumps to avoid comfort complaints. Thus, electric resistance heat will likely be installed, which is not usually cost effective.

111. Indeed, the National Association of Home Builders "Residential Construction Performance Guidelines" published in 2000, requires heating systems to be capable of providing 70 degrees at all times, except when superseded by state or local codes. Operation of heat pumps in the defrost cycle without electric heat will almost certainly result in temperatures lower than 70 for at least some periods of time in the winter. There is not another building energy code in the world, even IRC, that prohibits the use of electric heat in the defrost cycle of heat pumps.

112. No limits are placed on humidification and dehumidification systems and humidistats, as in IECC. The PHRC requirement is less stringent than IECC.

113. While duct insulation is in 1104.3, there are no provisions for plenum insulation, as in IECC. The PHRC requirement is less stringent than IECC.

114. There are no provisions for duct construction and air leakage testing, as in IECC. Only the sealing of duct joints is covered in 1104.4. The PHRC requirement is less stringent than IECC.

115. In 1104.5 and Table 1104.5 the pipe insulation thicknesses are greater than IECC for some pipe sizes (and thus uneconomical) and less than IECC for other pipe sizes (and thus inefficient).

116. Also, 1104.5 covers pipe insulation for all mechanical systems, including domestic hot water, and places those requirements in Table 1104.5. However, Table 1104.5 only covers HVAC piping insulation and not domestic hot water pipe insulation. Domestic hot water pipe insulation

requirements, equal to those in IECC, must be added.

117. There are no provisions for mechanical ventilation systems and/or means for controlling their operation, as in IECC. The PHRC requirement is less stringent than IECC.

118. Since these provisions in PHRC also can be applied for repairs and replacements, when the type of equipment or system being repaired or replaced is not covered by PHRC, or there are no required industry standards against which performance and efficiency is to be measured, then there are no requirements to be complied with, contrary to IECC. Water heaters and HVAC systems are frequently repaired or replaced. Thus, very substantial energy savings will not be achieved with the PHRC Alternative. The PHRC requirement is less stringent than IECC.

#### PHRC Conclusions

119. If PHRC is the attempt to implement Section 301 (c) of Act 45, which requires "prescriptive methods to implement the energy-related standards of the Uniform Construction Code" it has failed miserably, due to the almost universal disregard for the minimum energy conservation requirements of the UCC, IRC, and IECC, Federal Law, and Federal Rules.

120. PHRC is an invitation to encourage lower quality and less energy efficient construction than in most surrounding states and across the country. For those Pennsylvania municipalities who are now using IECC or IRC or their predecessors, adoption of PHRC is a big step backwards.

121. Under Federal Law and regulations, the residential energy code adopted and enforced in Pennsylvania must equal or exceed the requirements of IECC 2000. PHRC does not even come close. If these PHRC provisions are submitted to the Department of Energy for approval, it is a virtual certainty they will be rejected.

122. I am not aware of any other modern state energy code in the country that allows minimum requirements as low as those are in PHRC.

123. Therefore, since it can and probably will be used for most of the building permits in Pennsylvania, the PHRC Alternative must be either completely deleted or completely rewritten and published again for public comment and public hearings. The PHRC Alternative is not equivalent to the IRC or IECC by any method of measurement or comparison. How anyone can claim the provisions are "equivalent to the provisions of the International Energy Conservation Code (IECC 2000)," as stated in the Preface of PHRC is simply unbelievable. Virtually every requirement in PHRC is less stringent and less energy conserving than those in both the IRC and IECC. With this many deviations from the minimum requirements in the IRC and IECC, the PHRC Alternative appears to be a deliberate and intentional subversion of nationally accepted energy conservation codes and standards.

#### **INTERNATIONAL ENERGY CONSERVATION CODE (IECC)**

124. In Paragraph 403.21 (a) (8) the Department proposes to adopt the 2000 IECC. The proposed rule requires that all commercial buildings and all residential buildings except detached one and two family homes and townhouses comply with either COMcheckEZ or Chapters 7 or 8 of the 2000 IECC.

There are some very serious problems with this proposal.

125. The minimum requirements for energy conservation in the 2000 IECC are taken from or based on those in ANSI/ASHRAE/IES Standard 90.1-1989, which were established in the mid 1980's, almost 20 years ago. Besides being woefully out of date, those requirements are not economically consistent today. Indeed, some requirements in the 1999 and 2001 Standards are less stringent than those in the 1989 Standard are, while most requirements are more stringent. Most importantly, the later Standards use consistent economic criteria across all products, climates, and components of buildings.

126. For economic consistency, ease of use, and improved energy conservation, ANSI/ASHRAE/IESNA Standard 90.1-1999 should be adopted in Pennsylvania, as has already been done by ICC in the 2001 and 2002 Supplements to the ICC Codes. The 1999 Standard has also been adopted and is now being enforced statewide in New York and New Jersey. This can be done by simply adopting the 2001 or 2002 Supplement to the 2000 IECC.

127. The just published NFPA 5000 Building Code has adopted ANSI/ASHRAE/IESNA Standard 90.1-2001.

128. There are still some additional serious problems with the way the Department has proposed adopting IECC.

#### Noncompliance With Federal Laws and Rules

129. First, Paragraph 401.1 defines residential building as:

"Construction that relates to detached on-family and two-family dwellings and multiple single-family dwellings (townhouses) that are not more than three stories in height with a separate means of egress..."

130. Then, 401.1 defines commercial construction as:

"A building, structure or facility that is not a residential building."

131. However, IECC defines residential buildings as:

"Detached one-and two-family dwellings. A building containing multiple (i.e., three or more) dwelling units where the occupants are primarily permanent in nature, such as townhouses, row houses, apartment houses, convents, monasteries, rectories, fraternities and sororities, dormitories, and rooming houses, all of which are three stories or less in height above grade."

132. And IECC defines commercial buildings as:

"All buildings over three stories in height above grade or buildings, other than residential buildings, that are three stories or less in height above grade."

133. Therefore, there are some very basic and fundamental differences in the definitions between the UCC proposed by the Department and the very ICC Codes they propose to adopt. Section 101.3.2 of IECC requires commercial buildings to comply with Chapters 7 or 8 of IECC, which were never intended to include requirements for most types of residential buildings defined by IECC. Yet, the UCC requires those buildings to comply with Chapters 7 or 8 of IECC. This will impose very substantial cost and complexity burdens on all low rise residential buildings that were never intended. For example, the insulation and equipment efficiency requirements for these commercial buildings are not the same as those for residential buildings. In some instances they are more stringent, and in other cases, less stringent.

134. By requiring these types of residential buildings to comply with the commercial building energy provisions of IECC will disqualify Pennsylvania from complying with the requirements of the 1992 Federal Energy Policy Act and the United States Department of Energy rules in the CFR.

#### Referenced Standards

135. The 2000 IECC requires compliance with the Referenced Standards in Chapter 9. However, some of those standards are obsolete and are no longer used or are not consistent with the values shown in the other chapters in IECC. For example, the Air Conditioning and Refrigeration Institute (ARI) Standards 325-93, 325-93, 340/360-93, and 550/590-98 that are referenced in Chapter 9 of the 2000 IECC have either been superseded by later versions or the values in the Tables that refer to these standards are based on different or prior versions. Thus, it is not possible to buy products today that have been tested and rated to meet the requirements of these obsolete and superseded standards and the values in the Tables.

136. Most of the minimum requirements in the 2000 IECC are based on standards that existed in the early to mid 1980's, most of which have been superseded, or revised or changed in some material way. While IECC has updated most of the referenced standards when the 2000 IECC and Supplements were issued, most of the minimum requirements in the chapters of IECC have remained unchanged since originally established in the late 1980's.

137. When ARI or most standards setting organizations publish new standards, most product manufacturers test and rate their products to the new standards. Thus, one cannot likely buy a piece of equipment today that meets the requirements of a standard like ARI 325-93. Products sold today are tested and rated to meet ARI 325-98.

138. Manufacturers are not going to readily test and rate today's products to obsolete and different standards that existed 15 or 20 years ago, unless paid specially and additionally. Then, there is also the chance that today's products might not meet some provisions or requirements of the earlier standards. To impose these additional and unnecessary burdens and costs on Pennsylvania consumers is simply not reasonable or justified.

139. ASHRAE Standard 62-89 has had dozens of addenda added since 1989 that are not referenced by IECC 2000, and has also been superseded by ASHRAE Standard 62-2001. NFRC Standards 100-97 and 200-95 have been replaced by Standards 100-2001 and 200-2001, both of which use entirely different methods of measurement than their predecessors. Thus, it is not possible to buy products any longer that comply with the NFRC Standards referenced in IECC 2000, unless the manufacturers

provide two sets of ratings based on two sets of tests. Besides the resulting confusion, most manufacturers are not likely to spend the money to provide a second set of tests and values for every type and size product they make and sell. Thus, consumers will not readily be able to determine if the products on the market today meet yesterday's standards.

140. Therefore, it will be difficult or impossible or very expensive to properly and completely comply with the rules as proposed by the Department. Designers, contractors, and building officials will put themselves at great risk when designing, furnishing, or approving some products, should noncompliance be found. To responsibly deal with these problems in the IECC will require changing or amending the L&I proposed rules, the standards or the values, or adding provisions exempting or changing some requirements.

#### ADDITIONAL COMMENTS NOT IN ORDER

141. In the preamble on page 4129 of the Pennsylvania Bulletin, the Department claims that the PHRC Alternative "provides additional prescriptive methods to demonstrate compliance with 'International Energy Conservation Code' requirements." (Emphasis added) As described in my numerous comments above, the PHRC is not as stringent as IECC or IRC. Therefore, it is not possible to use PHRC to demonstrate compliance with either IECC or IRC.

142. In that same paragraph in the preamble it implies that MECcheck can be used to demonstrate compliance with PHRC. That is also not correct. MECcheck also cannot be used to demonstrate compliance with IRC. Therefore, methods for demonstrating compliance with both PHRC and IRC must be provided in the rules by the Department.

143. In that same paragraph it also says "the additional prescriptive method for all other buildings and structures is found in ... COMcheck." (Emphasis added) However, COMcheck was never intended to and is not capable of providing a prescriptive method of compliance for many covered building types, such as, but not limited to garden apartments, rectories, convents, and dormitories. Therefore, under the provisions of Section 301 (c) of Act 45 that requires prescriptive methods, the Department must provide prescriptive methods for these buildings and structures.

144. Section 301 (c) of Act 45 requires prescriptive methods that "take into account the various climatic conditions throughout this Commonwealth." The Statute does not require additional prescriptive methods, contrary to what is stated in the preamble. Delete the PHRC Alternative.

145. Pennsylvania climates range from less than 5,000 heating degree days to more than 7,000 heating degree days, a variation of more than 40%. The PHRC Alternative provides only three climatic zones in Pennsylvania. Three zones are not sufficient to take into account climate variations this wide. Every national or regional building code, standard, and recommended practice for building design and energy conservation includes more than three zones for Pennsylvania. No explanation or justification for having only three zones is provided. More climatic zones must be provided.

146. Using the PHRC climate zones, two houses built almost across the street from each other will be required to have substantially different windows, walls, and ceiling insulation. For example, a house in the northern suburbs of Wilkes Barre requires a ceiling with R-38, while a house in the southern suburbs of Scranton, across the street, requires a ceiling with R-49 insulation, or 29% more

insulation. Either the R-49 is economically justified and R-38 wastes energy, or the R-49 is not economically justified. There is no common or economic sense to such a wide difference in requirements. Therefore, if PHRC is to remain, more climate zones must be added to make common sense, economic sense, and to follow nationally accepted practices.

147. Paragraph 1103.7.2 and Table 1103.6 do not allow propane, Pennsylvania coal, or wood heating equipment to be used, the same as gas and oil. These omissions are discriminatory, anti competitive, and illegal, and must be rectified.

148. Paragraph 1103.7.2 and Table 1103.6 do not allow electric convective, electric radiant, or electric storage heating equipment to be used, the same as high efficiency heat pumps. Room by room electric heat, radiant electric heat, or electric heat storage systems can be just as energy efficient and economically efficient as a heat pump, and more so in many instances. For example, most electric heating systems can be operated in only those rooms that are being occupied, while a heat pump must heat the entire house, even though it is not fully occupied. These omissions are discriminatory, anti competitive, and illegal, and must be rectified.

149. In addition, those types of electric heating do not automatically include cooling systems, like heat pumps do, so it is possible that cooling may not even be installed in many houses, saving even more energy and money. While heat pumps may be more theoretically efficient than other types of electric heat, they can end up using more energy than other types of electric heat. Thus, high efficiency electric heat pumps will waste energy efficiently.

150. Paragraph 1103.7.2 and Table 1103.6 do not allow hot water radiant heating systems to be used, except with high efficiency heating equipment. Hot water radiant heating systems with lower efficiency heating equipment can be just as energy efficient as heating systems with the high efficiency equipment now shown in Table 1103.6. Hot water radiant heating systems usually have multiple zones and also allow comfort to be achieved at lower room temperatures than forced air heat, and thus use measurably less energy. However, builders will not likely install more expensive radiant heating systems if they also must install much more expensive high efficiency boilers as well to be able to use the option in 1103.7.2. Add hot water radiant heat to the allowable high efficiency heating systems, without having the 90% AFUE requirement.

151. Builders who elect to use the option in PHRC paragraph 1103.7.1 are likely to build houses that will threaten the health of the occupants. These houses may not have enough ventilation or infiltration to meet industry minimum standards. By having very low air infiltration, and no ventilation, there very well may not be sufficient outdoor air to dilute contaminants. Low air infiltration can also contribute to and aggravate higher indoor humidity conditions and the growth of mold and mildew, which further compromises the health of the occupants. Since there are no minimum ventilation requirements and no requirements for heat recovery ventilation systems in the proposed rules or referenced documents, no requirements are imposed to mitigate or minimize these potential health problems. Do not promulgate rules that threaten the health of building occupants.

152. Many insurance companies that offer homeowners insurance in Pennsylvania, including mine, are now drastically limiting coverage for mold, or are no longer providing any mold coverage at all. Do not allow building code requirements to increase the potential for the growth of mold, while at the same time insurance coverage for mold is being reduced or eliminated and/or the insurance premiums

are being increased if mold coverage is available at all.

153. The description of the options in both PHRC 1103.7.1 and 1103.7.2 allow "The above-grade portions of the building's thermal envelope..." to comply with Table 1103.4. The building thermal envelope means all elements of the exterior of the building, including walls, roofs, ceilings, and floors exposed to exterior weather. However, the heading in that Table for thermal insulation limits the trade off only to the walls. Therefore, it is quite likely that people will not read the Table carefully enough, and they will use the R-values in the Table for all parts of the building thermal envelope, exactly as stated in the text of 1103.7.1 and 1103.7.2. The options must be more clearly described and made consistent with the Table.

154. L&I should propose to adopt the 2003 International Codes, which should be approved two weeks from today and will be available shortly thereafter. We have waited three years for L&I to publish this proposed rule, so waiting another few weeks or months should not be a problem. The 2003 Codes will give us the most refined, up-to-date, state-of-the-art International Codes available. The errors in the First Printing of the First Edition have been fixed.

155. In the alternative, the National Fire Protection Association (NFPA) has just published a new American National Standards Institute approved Building Code, which can be used in lieu of all of the International Code Council Codes. Most building code and fire safety officials in Pennsylvania are already familiar with many of these requirements. This would require action by the Legislature, since the current Law requires adoption of the BOCA Codes, or their successors. Therefore, L&I should evaluate and compare the two sets of Codes, seek public comment, and advise the Legislature if changes in the Law should be made.

156. L&I should delete the PHRC Alternative. Both the NFPA and the International Codes already contain prescriptive methods that account for Pennsylvania climatic conditions and that balance energy savings with construction costs, as required by the Law. My comments above contain extensive details and reasons why the PHRC Alternative should be dropped.

157. With such major changes in the building codes for the design and construction industry about to take place in Pennsylvania, it is more important than ever for our Government to provide us with the most up-to-date comprehensive requirements that can be implemented and enforced to achieve the desired public health and safety. Please do not begin enforcing a statewide building code with antiquated requirements.



THE HOSPITAL & HEALTHSYSTEM ASSOCIATION OF PENNSYLVANIA

May 28, 2003

Mr. John McGinley, Jr.  
Chairperson  
Independent Regulatory Review Commission  
333 Market Street  
14<sup>th</sup> Floor  
Harrisburg, PA 17101

Dear Mr. McGinley:

The Hospital and Healthsystem Association of Pennsylvania (HAP), on behalf of its members (more than 250 acute and specialty hospitals and health systems in the commonwealth), appreciates the opportunity to comment on the Department of Labor and Industry's final-form rulemaking for the adoption and enforcement of the Uniform Construction Code.

HAP fully supported the adoption of a uniform construction code to provide consistency in standards for construction and renovations throughout the commonwealth, and recognizes that regulations are required to implement the uniform construction code. However, HAP cannot support the final-form rules as proposed.

HAP acknowledges the Department of Labor and Industry's efforts to incorporate many changes in the final-form rulemaking from the proposed version. The final-form version of the uniform construction code regulations remain, however, administratively confusing, burdensome, duplicative and cost prohibitive for hospitals and health systems. The end result, if approved, will be to shift the focus of providing and improving the delivery of health care services to patients by diverting limited resources to address and comply with regulatory mandates. Patients and their communities are the ones ultimately affected when regulations are complicated, duplicative and cost prohibiting.

We strongly urge you to support efforts to ensure that fair and appropriate standards are adopted for hospitals and health systems in the commonwealth. Please feel free to contact me at (717) 561-5344, or Melissa N. Speck, director, policy development, at (717) 561-5356 should you have any questions regarding our position on this final-form regulation.

Sincerely,

PAULA A. BUSSARD  
Senior Vice President  
Policy and Regulatory Services

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Original: 2283



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MAY 28 10 09 AM '03  
REVIEW COMMISSION

May 27, 2003

John R. McGinley, Jr., Esq.  
Chairman  
Independent Regulatory Review Commission  
333 Market Street, 14<sup>th</sup> Floor  
Harrisburg, Pennsylvania 17101

Subject: Proposed Uniform Construction Code Administration and Enforcement Regulation

Dear Chairman McGinley:

Enclosed please find comments regarding the Department of Labor and Industry's proposal to reference the International Code Council Electrical Code instead of directly referencing the National Electric Code.

We, as well as the IRRRC, and several others provided testimony or written comments last summer during the public commentary period regarding this issue.

However, the Department of Labor and Industry has resubmitted their proposal to reference the ICC Electrical Code. This proposal is now currently before the IRRRC for final review.

I ask you and your Commission to consider the information included within my commentary. I believe the Commission will agree the best course of action for the citizens of Pennsylvania will be to directly reference the National Electric Code.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Benjamin Roy, Jr." with a stylized flourish at the end.

J. Benjamin Roy, Jr., CFPS  
Regional Manager



# NFPA

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***Comments Submitted  
To The  
Independent Regulatory Review Commission***

***Regarding  
the  
Proposed  
Uniform Construction Code  
Administration and Enforcement  
Regulation***

***Submitted  
by  
J. Benjamin Roy, Jr., CFPS  
Regional Manager  
National Fire Protection Association***

***May 27, 2003***

My name is Benjamin Roy and I am the Mid-Atlantic Regional Manager for the National Fire Protection Association (NFPA). Thank you for allowing me the opportunity to provide comments regarding the proposed Uniform Construction Code Administration and Enforcement Regulation.

As you are aware, NFPA is an international, non-profit organization that serves as the world's leading advocate of fire protection and is an authoritative source on public safety. Our organization is dedicated to reducing the worldwide burden of fire and other hazards on the quality of life by providing and advocating scientifically-based consensus codes and standards, research, training, and education. NFPA was founded in 1896 and is the premier fire and life safety codes development organization in this country as well as most of the rest of the World.

The purpose of my commentary is to urge the commission to remove references to the ICC Electrical Code from this proposed rule and substitute references to NFPA 70, National Electrical Code® (NEC) to address electrical installations. Not only would this rulemaking to adopt the ICC Electrical Code make Pennsylvania the only state in the country to adopt the ICC document to address electrical installations, but it will place Pennsylvanians who work in the electrical community in an unfamiliar position. For instance, all of the apprenticeship training they have gone through has been based on the NEC. Additionally, all the third party inspection agencies also are trained on the provisions of the NEC. Neither the inspectors nor the industry has any experience working with the unproven, untested ICC electrical document.

NEC is the most widely used and recognized electrical code in the world. This proposed adoption would preclude direct adoption of the (NEC). It is the only nationally developed electrical installation code that is directly adopted or is the basis for electrical installation requirements in all fifty states. The NEC has been the source for electrical installation requirements for over 100 years, not only in Pennsylvania, but also throughout the United States and continues to be the nationally recognized benchmark for electrical safety.

NFPA's 300 safety codes and standards influence every building, process, service, design, and installation in the United States. Many of our documents are used in Pennsylvania, either on a statewide basis or by municipal jurisdictions. The most significant of these documents is the NEC. No doubt this document has been the most uniformly used safety document, not only by code enforcers, but also by the trades, industry, and the utilities in Pennsylvania for several generations. In attempting to provide a Uniform Code within Pennsylvania, the proposal to adopt, by reference, the ICC Electrical Code, will have the opposite effect.

The *National Electrical Code*® is developed and updated through a consensus process that involves input from all interested parties. These parties represent electrical contractors, designers, inspectors, and manufacturers; electrical testing laboratories, electricity suppliers and utilities; as well as enforcing authorities, insurance organizations, labor, and other users. That means that it reflects the best electrical safety expertise and knowledge from the electrical community. On the other hand, the ICC electrical document can be edited through a process that does not involve all interested parties. It is not the best way to make decisions about electrical safety.

Additionally, the International Residential Code (IRC) also is being proposed for adoption by reference in Pennsylvania. The electrical chapters in the IRC are based on requirements contained in the NEC under an agreement between the ICC and NFPA. However, the IRC does not contain requirements for commonly used electrical equipment such as air conditioners, electric heat, and communications wiring. The electrical chapters of the IRC are intended to be used with the full NEC, necessitating the use of two documents for electrical installation requirements covering one- and two-family dwelling units. The NEC provides the complete package of electrical requirements, eliminating any need for the electrical installation chapters in the IRC.

It is widely known that the International Codes Council (ICC) – the organization that created the ICC Electrical Code – has stated that “it has no plans for the development of an electrical code that would duplicate the purpose and then compete with the NEC.” It does not seem prudent for the Commonwealth of Pennsylvania to adopt a code that is not even supported by the organization that developed it. And, no other state has adopted the ICC’s electrical document, because it is insufficient.

The ICC Electrical Code was developed as an administrative document to regulate electrical installations. Its original purpose was not to directly create technical requirements that would amend those contained in the NEC. However, the ICC code development process does not preclude the inclusion of technical requirements in the ICC Electrical Code which may amend or contradict requirements in the NEC that have been developed through a balanced, technically-based, consensus process, and approved by the American National Standards Institute (ANSI).

On behalf of NFPA, I, as well as others in the electrical industry, have strongly urged the Department of Labor and Industry to adopt NFPA 70. Unfortunately, and for reasons that are not clear, the Department has chosen to submit its recommendations to this commission to adopt the ICC Electrical Code.

I strongly urge the IRRC to remove references to the ICC Electrical Code from this proposed rule and substitute references to the *National Electrical Code*® to address electrical installations. In addition, the electrical chapters in the IRC

should be amended to only reference the NEC. Mandating the *National Electrical Code*® will result in the continued application of a document that has been used in Pennsylvania for decades and will be compatible with the standard for electrical safety in use throughout the United States. In other words, such action will ensure continued uniformity of electrical installations throughout Pennsylvania. Further, mandating the use of the NEC will have no negative impact on the inspection agencies, the electrical trades, or industry that are all intimately familiar with the provisions of this document and have been for many, many years. But most importantly, the continued use of the *National Electrical Code*® will be the best way to protect the people and property within the state of Pennsylvania from the potential fire and shock hazards arising from the use of electricity.

Thank you for allowing me to present the views of NFPA. If you need additional information please do not hesitate to contact me.



McNees Wallace & Nurick LLC  
attorneys at law

Original: 2283

LAWRENCE R. WIEDER  
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May 19, 2003

John R. McGinley, Jr.  
Chairman  
INDEPENDENT REGULATORY REVIEW COMMISSION  
333 Market Street  
14th Floor  
Harrisburg, PA 17101

**RE: Comments of the Pennsylvania Manufactured Housing Association ("PMHA"), to the Department of Labor and Industry's ("L&I") proposed regulations, issued pursuant to the Uniform Construction Code (the "UCC"), 35 P.S. §§ 7210.701 – 7210.1103, Regulation #12 – 60 (#2283)**

Dear Mr. McGinley:

On behalf of PMHA we write in opposition to those proposed portions of the UCC, which seek to regulate manufactured and/or industrialized housing in the Commonwealth of Pennsylvania.

Previously, on September 27, 2002, we wrote the Commission explaining that the Act, upon which the proposed regulations are based, specifically exempts manufactured and industrialized housing from its purview. A copy of that correspondence is attached.

The applicable portion of the Act at 35 P.S. § 7210.901 states:

This act shall not apply to manufactured housing which bears a label, as required by and referred to in the act of November 17, 1982 (P.L. 676, No. 192), known as the Manufactured Housing Construction and Safety Standards Authorization Act, which certifies that it conforms to Federal construction and safety standards adopted under the Housing and Community Development Act of 1974 (Public Law 93-383, 88 Stat. 633), nor shall it apply to industrialized housing, as defined in the act of May 11, 1972 (P.L. 286, No. 70), known as the Industrialized Housing Act. (Emphasis added)

We also brought our concerns to the attention of the House Labor Relations Committee. After reading our analysis, that Committee concluded that our position had merit. By correspondence of October 15, 2002, the Committee wrote to L&I. It stated:

While we believe all of the stakeholder comments warrant evaluation, in particular, we believe the department should:

Seriously consider expanding the exemption language for modular and manufactured housing. The Pennsylvania Manufactured Housing Association and the Modular Home Building Systems Association have presented logical and legal arguments about sections of the regulations that go beyond the scope of statutory authority granted the department in Act 45.

A complete copy of that correspondence is attached.

After review, the Commission published its findings in the Pennsylvania Bulletin, Vol. 32, No. 45, November 9, 2002 at page 5587. The finding stated:

MBSA argues that the proposed regulation conflicts with the Industrialized Housing Act and regulations administered by the Department of Community and Economic Development (DCED) which comprehensively regulate both the manufacture and onsite completion of the home. PMHA also argues that the Industrialized Housing Act and the Manufactured Housing Act govern the installation of these homes. Senator Gibson E. Armstrong, Chairperson of the Senate Labor and Industry Committee, submitted a letter questioning the Department's authority to include manufactured and industrialized housing in this regulation. We also question the Department's statutory authority for including industrialized and manufactured housing in § 403.25.

On May 8, 2003, L&I forwarded to the Commission, its notice of intention to promulgate administrative regulations. The proposed regulations continue to seek to regulate manufactured and industrialized housing in the Commonwealth, despite the adverse comments of both the House Labor Relations Committee and the Commission.

Independent Regulatory Review Commission  
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Page 3

We request that IRCC either determine that L&I is without the legislative authority to regulate manufactured or industrialized housing pursuant to the UCC or, while seemingly an unnecessary endeavor, schedule hearings to determine the intent of the General Assembly, when it stated:

This act shall not apply to manufactured housing...nor shall it apply to industrialized housing.

Sincerely,

McNEES WALLACE & NURICK LLC

By 

Lawrence R. Wieder

LRW/jlh

c: Honorable Stephen Schmerin, Secretary, Department of Labor and Industry





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Web site: www.pmha.org • E-mail: general@pmha.org

September 27, 2002

John Jewett  
Independent Regulatory Review Commission  
333 Market Street, 14<sup>th</sup> Floor  
Harrisburg, PA 17101

Re: Regulation #12-60 (IRRC #2283)  
Department of Labor and Industry  
Uniform Construction Code; Administrative and Enforcement, Elevators  
and other Lifting Devices

Dear Mr. Jewett:

Per your e-mail of Thursday, September 26, 2002 enclosed you will find a copy of our comments, which were submitted, to Labor and Industry on September 11, 2002. Note that we did copy the IRRC.

Thank you for your time and consideration.

Sincerely,

Mary Gaski, PHC  
Executive Vice President



McNees Wallace & Nurick LLC  
attorneys at law

LAWRENCE R. WIEDER  
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September 11, 2002

Charles J. Sludden, Director  
Bureau of Occupational and Industrial Safety  
Department of Labor and Industry  
Room 1613, Labor and Industry Building  
7<sup>th</sup> and Forster Streets  
Harrisburg, PA 17120

**RE: PMHA Response to Proposed Regulations Published August 24, 2002**

Dear Mr. Sludden:

At the request of PMHA, I write concerning the proposed regulations of the Department of Labor and Industry (the "Department"), which were published in the Pennsylvania Bulletin, No. 34, on August 24, 2002. The regulations are being promulgated pursuant to the Pennsylvania Construction Code Act (the "CCA"), 35 P.S. § 7210.101 *et. seq.* and seek to create a Uniform Construction Code ("UCC") in the Commonwealth.

In 1972 the General Assembly passed the Industrialized Housing Act (hereinafter the "IHA"). This law is codified at 35 P.S. 1651.1 *et. seq.* It provides that *mobile homes* should be certified separately from other categories of industrialized housing. A *mobile home* is defined as a structure within the meaning of the Uniform Standards Code for Mobile Homes, a law which is now repealed. That law, which was apparently passed moments before the IHA, was repealed in 1982 and replaced by the applicable provisions of the Manufactured Housing Construction and Safety Standards Authorization Act.

Pursuant to the IHA, regulations were promulgated. These regulations, which were last changed in 1997 are at 12 Pa. Code Chapter 145 and are entitled *Industrial Housing and Components*.

The IHA contains the following definitions:

***Industrialized housing;***

[A]ny structure designed primarily for residential occupancy which is wholly or in substantial part made, fabricated, formed or assembled in manufacturing facilities for installation, or assembly and installation, on the

building site; however, for the purposes of this act, that category of housing units defined as mobile homes is excluded from this definition.

***Installation:***

[T]he assembly of industrialized housing on site and the process of affixing industrialized housing or housing components to land, a foundation, footings, utilities or an existing building.

***Mobile Home:***

[E]very structure defined as a "mobile home" in section 2 of the Uniform Standards Code for Mobile Homes. (35 P.S. § 1655.2 {repealed; see now 35 P.S. § 1656.2}).

At 36 P.S. § 1651.2(7) the IHA provides:

While recognizing that mobile homes constitute a category of industrialized housing, it is further recognized that mobile homes differ in characteristics of sufficient significance that they should be certified separately by the Commonwealth from other categories of industrialized housing to be used in the Commonwealth.

Further, the regulations at 12 Pa. Code § 145.33 state:

**§ 145.33. Manufactured homes excluded.**

Manufactured homes which are subject to sections 604 and 625 of the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C.A. §§ 5403 and 5424) and the regulations issued thereunder by the United States Department of Housing and Urban Development are not subject to this chapter.

The regulations define a *mobile home*, presumably to determine the type of unit, which is excluded from regulation. That definition is:

***Mobile home:***

A structure, transportable in one or more sections, which is 8 body feet or more in width and is 32 body feet in length and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and including

Charles J. Sludden, Director  
Bureau of Occupational and Industrial Safety  
September 11, 2002  
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the plumbing, heating, air conditioning and electrical system combined therein manufactured in accordance with the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C.A. §§ 5401 – 5426).

Based upon the above, it is clear that the installation of *mobile homes* is not regulated by the IHA or its regulations. The installation of *industrialized housing*; however, is. The regulations are § 147.70(3)(i) provide:

- (3) *Inspection services by the Department will include:*
  - (i) *Monitoring the manufacturer's compliance control program for the manufacture, transportation and installation of industrialized housing or housing components.*

You should also be made aware of § 145.91(e) of the regulations, which provide:

#### **§ 145.91. Reports to the Department**

(e) A person installing industrialized housing or housing components for use on a site in a jurisdiction in this Commonwealth without a local enforcement agency shall prepare and mail to the inspection agency a Site Installation Inspection Report on a form furnished by the Department. If the manufacturer is not installing the industrialized housing or housing components, the manufacturer shall be responsible for furnishing to the person performing the installation a copy of the Site Installation Inspection Report form and instructions as to its intended use.

Based upon the above, it is my opinion that the IHA regulates the installation of *industrialized housing*, but not *mobile homes*. The term *industrialized housing* includes both manufactured homes and modular homes.

In 1982 the General Assembly passed the Manufactured Housing Construction and Safety Standards Authorization Act (hereinafter the "MHA"). The purpose of the Act is to establish construction standards for the manufacture and sale of manufactured homes in Pennsylvania. The law is codified at 35 P.S. 1656.1 *et. seq.* Accompanying regulations were promulgated and are codified at 12 Pa. Code Chapter 143. They are entitled *Manufactured Housing*.

The Act defines a *Manufactured Home* as:

**Manufactured home:**

A structure, transportable in one or more sections, which, in the traveling mode, is eight body feet or more in width, or 40 body feet or more in length, or, when erected on site, is 320 or more square feet and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities and includes the plumbing, heating, air conditioning and electrical systems contained therein. The term shall include any structure which meets all the requirements of this paragraph except the size requirements and with respect to which the manufacturer voluntarily files a certification required by the United States Department of Housing and Urban Development and complies with the standards established under this act.

I note that a mobile home falls within the definition of a *manufactured home*.

Relative to the installation of *manufactured homes*, the regulations at 12 Pa. Code § 143.3 provide:

**§ 143.3. Scope.**

Except to the extent otherwise stated in other applicable laws of the Commonwealth which are not inconsistent with or superseded by the act or Federal act, this chapter governs the design, manufacture, storage, transportation and installation of manufactured housing which is sold, leased or installed, or is intended for sale, lease or installation, or use on a site in this Commonwealth, or manufactured in this Commonwealth and sold or offered for sale outside this Commonwealth. This chapter applies to manufactured housing manufactured in manufacturing facilities located within or outside this Commonwealth.

Accordingly, the standards concerning the installation of *manufactured homes* falls with the purview of the regulations.

In 1999, the General Assembly passed the CCA. The proposed regulations are being promulgated pursuant to that law. The CCA defines *industrialized housing* as per the IHA. It further defines *manufactured housing* as housing that bears a label required by Pennsylvania's MHA. The Act does not contain a specific definition of a *mobile home*; accordingly, unless one determines that a mobile home falls within the definition of *industrialized housing* as contained in the IHA (which it does not), the CCA does not govern mobile homes.

The CCA provides:

**§ 7210.901. Exemptions.**

This act shall not apply to manufactured housing which bears a label, as required by and referred to in the act of November 17, 1982 (P.L. 676, No. 192), known as the Manufactured Housing Construction and Safety Standards Authorization Act, which certifies that it conforms to Federal construction and safety standards adopted under the Housing and Community Development Act of 1974 (Public Law 93-383, 88 Stat. 633), nor shall it apply to industrialized housing, as defined in the act of May 11, 1972 (P.L. 286, No. 70), known as the Industrialized Housing Act.

The exemption is clear and unambiguous. The Act cannot, in any manner, regulate manufactured, modular or mobile homes. The continued position of the Department and apparently the Office of the Attorney General, that the exemption applies only to the manufacture of the homes, ignores the specific language of the Act. The regulation which seeks to mandate the manner in which a manufactured, modular or mobile home is installed in the ground, hooked up to utilities, altered or repaired regulates the very housing, which the law specifically states cannot be regulated.

Pennsylvania courts have consistently held "that the power and authority exercised by an administrative agency in its rule-making must be conferred by language that is clear and unmistakable and the regulatory action must be within the strict and exact limits defined by the statute." *Pennsylvania Medical Society v. Pennsylvania State Board of Medicine*, 118 Pa. Commw. 635, 546 A.2d 720 (1988) citing *DeMarco v. Department of Health*, 40 Pa. Commw. 248, 397 A. 2d 61 (1979). See also *McKinley v. State Board of Funeral Directors*, 11 Pa. Commw. 241, 313 A.2d 180 (1973), *Volunteer Firemen's Relief Association of the City of Reading v. Minehart*, 425 Pa. 82, 227 A.2d 632 (1967) and *Commonwealth v. DiMeglio*, 385 Pa. 119, 122 A.2d 77 (1956). The Department has no authority to regulate manufactured, modular or mobile homes, because that power was not conferred by the General Assembly.

Assuming arguendo, that somehow the Department is authorized to promulgate the regulations, their review evidences other problem areas as well. Relative to *manufactured housing*, the regulations adopt Appendix E of the IRC. Our review of the CCA does not evidence that the legislature authorized the Department to adopt an appendix to a Code.

Further, a review of Appendix E reveals that generally speaking, it provides standards for the *installation* of manufactured housing. Since § 403.25(a)(2) of the regulations does not list installation as an area being regulated, we do not understand the basis for the adoption of the Appendix. Such an adoption serves only to create confusion as to whether there is a regulatory standard and if so, what it is.

Similarly, the adopted sections of Appendix E are incomplete and vague. For example Section AE501 states:

**AE501.1 General.** A manufactured home shall be installed on a foundation system which is designed and constructed to sustain within the stress limitations specified in this code and all loads specified in this code.

**AE501.3 Rationality.** Any system or method to be used shall admit to a rational analysis in accordance with well-established principles of mechanics.

Relative to AE501.1, the referenced sections of the Code do not appear to have been adopted. Relative to AE 501.3, the section is vague.

Finally, the Department's proposed regulations regarding *industrialized housing* do not adopt the Appendix E guidelines for installation; however, § 403.25(b)(2)(iv) specifically includes *installation* as an area to be regulated. As such, the standards governing the installation of industrialized housing are in doubt as the regulations do not appear to contain any.

The CCA provides:

#### § 7210.104. Application

(a) **General Rule.** – This act shall apply to the construction, alteration, repair and occupancy of all building in this Commonwealth.

A review of the above indicates that the word *installation* does not appear. The rules of Statutory Construction dictate that in determining legislative intent, the use of a word or its absence has meaning. Since the General Assembly used the word *install* in similar legislation, it could have used the same word in this Act, if it chose to do so.

Moreover, the word is not one that would have escaped the attention of the General Assembly. The failure of the General Assembly to use the word *install* in §104 further evidences its intent that the Act not apply to the installation of manufactured, modular or mobile homes. Not only do the proposed regulations seek to regulate the installation of industrialized housing, but we regard site preparation, foundation construction and connection to utilities as *installation*. Those mandates apply to both manufactured and industrialized housing.

That same issue is addressed elsewhere in the CCA, which at § 7210.301(d) provides:

**(d) Scope of regulations.**

(1) The regulations adopted by the department implementing these codes shall supersede and preempt all local building codes regulating any aspect of the construction, alteration and repair of buildings adopted or enforced by any municipality or authority or pursuant to any deed restriction, rule, regulation, ordinance, resolution, tariff or order of any public utility or any State or local board, agency, commission or homeowners' association except as may be otherwise specifically provided in this act. (Emphasis supplied).

Again, the absence of the word *installation* from the Scope of regulations is telling. Not only does the Act specifically exempt manufactured, modular and mobile homes from any form of regulation, but the Scope of the regulations contains no authorization for the regulation of the installation of housing.

In summary, we believe the following to be a correct synopsis of the law:

1. The IHA applies to *industrialized housing*, a term which includes manufactured homes and modular homes, but not mobile homes. There are regulations which govern the installation of the applicable homes. They are based upon the manufacturers standards.

2. The MHA applies to *manufactured homes*, a term which includes *mobile homes*. The scope of the regulations promulgated pursuant to the MHA address the installation of those homes.

3. The CCA does not apply to *manufactured housing*, (as defined by the MHA) which bears a label, as required by the MHA nor to *industrialized housing* (as defined by the IHA). The definitions of both those terms encompass manufactured, modular and mobile homes.



Charles J. Sludden, Director  
Bureau of Occupational and Industrial Safety  
September 11, 2002  
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4. The Department does not have the authority to promulgate regulations, which in any manner, regulate manufactured or industrialized housing in the Commonwealth.

Very truly yours,

McNEES WALLACE & NURICK LLC

By 

Lawrence R. Wieder

LRW/jlh

c: Pennsylvania Independent Regulatory Review Commission  
Ms. Mary Gaiski, Pennsylvania Manufactured Housing Association  
John P. Milliron, Esquire

Robert J. Flick, MEMBER  
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House of Representatives  
COMMONWEALTH OF PENNSYLVANIA  
HARRISBURG

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NEW MEMBER ORIENTATION CO-CHAIRMAN

October 15, 2002

Honorable Johnny J. Butler, Secretary  
Department of Labor & Industry  
1700 Labor & Industry Building  
Harrisburg, PA 17120

Re: Comments on Regulation #12-60 (IRRC #2283)  
Uniform Construction Code; Administrative and Enforcement;  
Elevators and Other Lifting Devices

Dear Secretary Butler:

We are writing to present the comments of the House Labor Relations Committee on the Department's proposed Administrative and Enforcement regulations (#12-60) for the Uniform Construction Code. We applaud the hard work the department's staff has exhibited in developing these proposed regulations. It is a difficult issue that affects many interested parties. Especially laudable is the time that department's staff has taken to meet with individuals and organizations, including the time the department took recently to conduct public hearings on these regulations. It is important stakeholders continue to have the opportunity to provide formal input. We are especially appreciative of the complete cooperation this committee has received from your staff. They were both professional and helpful in appearing before this committee to answer questions concerning these regulations. They were also willing to meet with our staff to clarify and explain the department's position on various issues.

As you are aware, the passage of SB 647, the Universal Construction Code (Act 45 of 1999) was the result of years of intense negotiation between all interested parties. While the Local Government Committee was the committee that debated and approved the legislation, it is the responsibility of the Labor Relations Committee, as the oversight committee in the House of Representatives for your department, to ensure the regulations which are ultimately promulgated properly reflect the overall legislative intent of SB 647, (Act 45 of 1999).

This act was passed for the expressed purpose of providing basic statewide standards for builders to follow while protecting consumers and occupants from poor construction. We understand that in attempting to write regulations which satisfy all the interested

cc: Brauer.

Page Two

parties, some conflicts may result. We recognize this challenge. The regulations, however, should maintain a balance between accomplishing the goal of specificity and the goal of being as citizen-friendly as possible.

It is our responsibility to ensure the proposed regulations are consistent with the original intent of the law and do not contain provisions that go beyond the scope of the law. It is also our responsibility to ensure the comments from stakeholders are fairly considered. Where appropriate, the regulations should be adjusted for stakeholder comments that point out technical errors or problems. They should also be adjusted for reasonable procedural changes that make the regulations more citizen-friendly.

Our Committee members, and staff, have carefully reviewed the proposed regulations and the comments stakeholders provided to the department. In addition, we reviewed several letters from stakeholders sent directly to our offices emphasizing their views. We also reviewed oral and written testimony received from major stakeholders at an informational meeting held October 3, 2002. At this stage of the regulatory process, it is not our desire to initiate a detailed technical commentary on each technical item/issue stakeholders have raised. However, we believe throughout this process many stakeholders have provided detailed, well-researched testimony giving their arguments significant merit. While we believe all of the stakeholder comments warrant evaluation, in particular, we believe the department should:

- Seriously consider making technical revisions to the proposed regulations where technical problems have been pointed out by respected organizations, such as comments offered by the American Institute of Architects-Pennsylvania.
- Seriously consider adopting suggestions concerning how the regulations can be made more minimally intrusive and user-friendly as was pointed out by the Pennsylvania State Association of Township Supervisors. Also consider the points made concerning fees, what actions require permits, etc.
- Seriously consider expanding the exemption language for modular and manufactured housing. The Pennsylvania Manufactured Housing Association and the Modular Home Building Systems Association have presented logical and legal arguments about sections of the regulations that go beyond the scope of statutory authority granted the department in Act 45.
- Seriously consider the requests made by the Hospital & Healthsystem Association of Pennsylvania on behalf of health care providers to maximize the cooperation between the Department of Labor and Industry and the

Page Three

Department of Health in the enforcement of the code to prevent multiple and duplicative inspections.

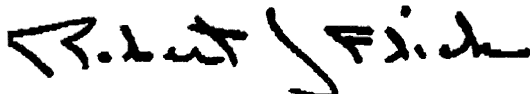
- Carefully evaluate concerns raised by the Accessibility Advisory Board to ensure, in the enforcement of the (Act 45 of 1999) regulations, municipalities meet the needs of our disabled population.

It is our intent to continue to seek information from stakeholders and to closely monitor the progress of the department's work on the final-form regulations. Again, we understand attempting to write regulations, which satisfy every party is not realistic. However, given the large volume of comments from interested parties, we feel the department should make every effort to work with affected parties to assuage as many of their concerns as possible.

The result of this process should be final-form regulations, which meet the original intent of the law, to provide a statewide building code that protects consumers and occupants, yet is not overly intrusive or bureaucratic. We trust the final-form regulations the department issue will satisfy most interested parties. Thank you for giving the Labor Relations Committee the opportunity to comment on the proposed regulations, #12-60 (IRRC #2283).

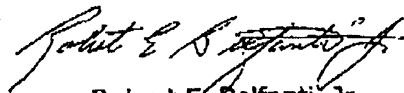
We have taken the liberty of attaching additional comments and testimony received from interested parties for the department to carefully consider. Best regards.

Sincerely,



Robert J. Flick  
Majority Chairman

Sincerely,



Robert E. Belfanti, Jr.  
Minority Chairman

cc: Labor Relations Committee Members  
Robert E. Nyce, Executive Director, IRRC