



Ohio Board of Building Standards

# BBS Newsletter

John R. Kasich, Governor  
David Goodman, Director  
David Williamson, Superintendent  
Gerald O. Holland, Chair  
**Volume 10 Issue 1**  
**Spring 2012**

## *Board of Building Standards Chair Gerald O. Holland Comments:*

Ohio's building department certification program is a model system. It ensures that certified building department personnel have sufficient training and resources to provide a high level of service to the construction industry. Building departments can help reduce unnecessary costs while increasing compliance. Recently, the Board of Building Standards (Board) has been working hard preparing building departments to apply the new code provisions included in the recent updates to the Ohio Building, Plumbing, and Mechanical Codes.

The new provisions became effective in November, and as part of the code update process, the Board provided a combined training/book distribution session to aid certified local building departments in applying the new codes.

In addition, code officials can now take advantage of new online training modules developed by the Board on updates to the Building, Plumbing, and Mechanical codes. I encourage all Board-certified personnel to explore these modules and earn continuing education credits. The modules are also available to the public at no cost for the benefit of designers, contractors, and builders.

Board staff is always available to respond to technical questions on Ohio's building codes. You can contact the Board office at (614) 644-2613 or at [dic.bbs@com.state.oh.us](mailto:dic.bbs@com.state.oh.us).

Sincerely,

Mr. Gerald O. Holland, Chair



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## ***Ohio Department of Commerce Director David Goodman:***

Dear Friend to Commerce:

The Department of Commerce is committed to assist businesses to operate lawfully so they can succeed as job creators and we can safeguard Ohioans. The Division of Industrial Compliance is working hand-in-hand with the Board of Building Standards to make sure that balance of jobs and safety are met through consistent application of the building code in the construction of Shale Processing Plants, wherever they may be in the state.

While oil exploration has been going on in Ohio since the early 1800s, new technology is making the industry viable in Ohio and surrounding states, which had not previously been leaders in oil & gas generation. Governor John R. Kasich is committed to ensure the Shale Oil and Gas industry is bringing jobs to Ohio and contributing to the energy needs of the region and the nation under the safest possible conditions.

One important component of this balanced success is to get out-of-state oil and gas producers to pay their fair share of taxes which would mean an income tax cut for Ohioans.

Ohio's oil & gas taxes are among the lowest in the nation. The state's 40-year-old oil and gas tax system is outdated. For example, there is no tax on natural gas liquids. Even with an increase, tax on production will still be among the lowest of oil and gas states. Just as Ohio is updating its environmental, health and safety regulations to keep pace with new technologies for the high-volume horizontal oil and gas wells, the tax policies associated with this industry must also be updated.

The benefit should be passed on to all Ohioans, who pay higher income taxes than two-thirds of the rest of the country. This tax cut would be particularly beneficial to the 75% of small businesses that file business taxes through their personal tax return. The Governor's plan to pass on new revenue from oil and gas taxes directly to taxpayers puts money in Ohioans' pockets which will fuel Ohio's economy.

A new industry holds great promise for the future; Oil & Gas production is certainly exciting. But the everyday business of the Board should not be overshadowed, since they have done so much important work in the last year.

Adopting a new Building Code and providing training in the building and fire codes has been a major accomplishment you will read more about in this edition.

A Residential Code update is long overdue and will provide guidance going forward.

When tornadoes swept through southwestern Ohio, people from across the state came together for immediate assistance. Now, as the communities rebuild from the damage, we take pride in the fact Ohio's Code will ensure that safe construction happens and communities will be rebuilt to the latest standards for safety.

My wish for each of you is that the warmer weather brings prosperity in your business because success for any of us is success for all of us. If you need assistance along the way, don't hesitate to call on us to guide you through the standards so that you can operate lawfully, succeed as job creators and safeguard Ohioans.

David Goodman  
Director, Ohio Department of Commerce



## *Training and Resources for Commercial Code Updates*

The Board of Building Standards updated the Ohio Building, Plumbing, and Mechanical Codes. These rules went into effect on November 1, 2011, and were based on the 2009 International Building, Plumbing, and Mechanical Codes published by the International Code Council (ICC).

As part of the process, the Board provides resources, including a set of code books with important referenced standards, to local building departments and the State's Bureau of Building Code Compliance to assist them in applying the new codes. Board staff also conducted three training sessions to distribute these materials to approximately 250 building officials representing commercial building departments from around the state. Each representative went home with at least one set of 17 new code books, standards, and reference materials.

The Ohio Fire Code updates adopted by the State Fire Marshal's Office also became effective on November 1, 2011, maintaining compatibility with the building code updates. For the first time, the Board and State Fire Marshal's Office have collaborated and jointly contracted with the ICC to provide one online code site and to develop online training for both building and fire officials. By combining our efforts, the Board and State Fire Marshal's Office are able to reach more local building and fire departments than in previous years.

Through collaboration and technology, the Board has provided more resources, training, and information to both code enforcement officials and the public than ever before to ease the transition to the new codes.



A packed house at a recent Commercial Code Update training session held in Reynoldsburg



### ***Free Online Training: Ohio Building, Plumbing, and Mechanical Code Update***

The Board of Building Standards is pleased to offer access to online training on the recent updates to the Ohio Building, Plumbing, and Mechanical Codes which became effective November 1, 2011. This training is being provided to all building department personnel and the public at **no cost**. The Board has contracted with the International Code Council (ICC) to develop and deliver eight courses on these updates:

- Six courses on the Ohio Building Code (OBC)
- One course on the Ohio Plumbing Code (OPC)
- One course on the Ohio Mechanical Code (OMC)

These courses are posted on online campus:  
[www.icccampus.org](http://www.icccampus.org)

Local building department personnel will be required to complete some or all of these modules and receive continuing education credit from the Board.

Building department personnel are pre-enrolled for the courses. The general public can also access the courses by e-mailing: [OHupdates@iccsafe.org](mailto:OHupdates@iccsafe.org). A reply e-mail will be sent with information on how to set up a username and password.

Once logged on, click on the "2011 Ohio Codes" button in the upper right hand corner of the page. This provides access to the free eCode site for looking up a code section while taking a course.

Courses can be complete at your own pace, and a certificate of completion will be provided at the end of each course. Once a course is completed, you may return and take the course again. Courses will be available until December 31, 2012.

For questions or comments related to the course content or code requirements, please contact the Board at (614) 644-2613 or e-mail Board Executive Secretary Regina Hanshaw directly at [rhanshaw@com.state.oh.us](mailto:rhanshaw@com.state.oh.us).

## ***Building Department Hours and Operations***

Board of Building Standards staff has recently fielded several inquiries regarding code requirements for certified building department hours of operations. With local governments exploring ways to control spending, it's time to review the minimum operational requirements.

Building code section 103.2.2(5) requires that certified building department offices are conveniently located within the area they serve, opened and staffed to serve the public, and have conspicuously posted hours. Construction normally begins early in the day and ends earlier than normal business hours. Building department hours are often aligned to this earlier construction day. Offering inspections **only** after normal business hours is a violation of the code. Building departments with part-time or contract services must comply with these requirements without burdening the owner or contractor. Services must be provided in a convenient, uniform, and timely manner.

Section 103.2.2(6) of the building code requires building departments, as a condition of their certification, to have all inspectors available for inspection requests. Even though the code allows up to four working days to perform requested inspections, they still must be done in a manner that serves the public need.

Every community has unique needs. Small village departments operate differently from those in large cities because the public need is different. However, all departments must comply with building code requirements and communicate their operations to the public.

### ***Residential Construction Advisory Committee Finalizes Recommendations***

The Residential Construction Advisory Committee (RCAC) has finalized its recommendation to the Board of the Building Standards (Board) regarding amendments to the Residential Code of Ohio which regulates 1-, 2- & 3-Family construction in the State of Ohio. The proposed amendments are based on changes included in both the 2006 and 2009 International Residential Codes published by the International Code Council.

As part of the Lt. Governor's Common Sense Initiative, the RCAC conducted a business regulatory impact analysis on the proposed amendments and documented its actions and findings in a Business Regulatory Impact Analysis Report (Report). The RCAC began its business regulatory impact analysis in 2011 as it was selected as a pilot for the Common Sense Initiative. The Report summarizes all the proposed changes to the Residential Code of Ohio codified in Ohio Administrative Code Chapter 4101:8, involvement by stakeholders to date, evaluates and justifies any adverse impact on the business community.

The Board accepted the recommendations of the RCAC at its meeting on January 27, 2012. The eNotification and rule-filing process is underway. The proposed rules and the Business Regulatory Impact Analysis Report can be found at: <http://www.com.ohio.gov/ProposedRules.aspx>



### ***Watch for Common Electrical Problems to Improve the Plan Review***

State Electrical Safety Inspectors (ESI) were recently asked to list the problems they see in the field that are missed in plan review most often. Here's a summary of the top five:

1. Grounding requirements on building electrical service;
2. Missing exit or egress lighting;
3. Providing restrike lighting;
4. Incorrect conductors or service conductors;
5. Incomplete fire alarms information or none provided.

This is valuable information that building departments can use to help improve their plan review process for electrical items.

By looking for these common problems in the plan review process, you can save time and money during construction, and buildings will be safer.

## ***Agricultural Building or Not An Agricultural Building: That is the Question***

When a township or county zoning inspector determines a building is being used for an agricultural purpose and has issued a certificate indicating such, then the building will be exempt from the rules of the Board of Building Standards. In other words, the building will be exempt from the application of the building codes and the building official does not need to further evaluate whether the building is being used for an agricultural purpose. But, there are many rural counties and townships that have opted not to adopt zoning requirements. If the county or township has a certified building department, but no zoning requirements adopted, then the building official must determine if the building or structure falls under the agriculture exemption of Section 3781.06 (B), R. C.

To make this determination, the building official should apply the standards of Revised Code Section 3781.06(B) by first determining if the building is located on land being used for an agriculture purpose. If so, then determine whether the building is incident to the agricultural purpose of the land. If so, then the building official must apply the second standard of Section 3781.06(B) of the Revised Code. The second standard set forth is that the building cannot be used for retail trade. A building or structure is not used for retail trade if 50% or more of the gross income from sales of product in the building or structure by the owner or operator is from sales of products produced or raised in a normal crop year on farms owned or operated by the seller. The Third District Court of Appeals ruled in *Boehm v. Waltz* (No. 6-87-10, 3rd District Court of Appeals, 1989) that the agricultural use exemption embodied in Revised Code 3781.06 does not extend to a structure used for agricultural purposes; the use of the land, not the structure, is controlling. As a result, the agricultural exemption should be easily resolved by consultation between the city or village building official and the zoning official. If there is no agricultural zone or a recognized nonconforming use, there can be no building incidental to agricultural use.

This retail trade test is similar to that used by the county or township zoning inspectors when they make the determination of issuing a zoning certificate. Sometimes, in a county or township that does enforce zoning regulations, it is difficult to know the sources of income and whether they flow from crops produced or animals raised on the farm. As a result, the zoning inspector may not have issued a zoning certificate declaring that the building is to be used in agriculture. In this case, as in the case where no zoning regulations have been adopted, the building official must determine if the building or structure falls under the agriculture exemption of Section 3781.06(B) of the Revised Code.

This issue should not exist in municipal corporations. The law recognizes that agricultural buildings do not exist within the political boundaries of the municipal corporation unless there is an agricultural district created by ordinance or there is a non-conforming use from the time that land was annexed into the municipal corporation.

### ***Building Code Authority for Shale Gas Processing Plants***

On March 12, 2012, Governor John R. Kasich signed an Executive Order for the Board of Building Standards to file emergency rules giving building code enforcement authority for of shale processing plants to the Ohio Department of Commerce, Division of Industrial Compliance. The rule will codify this authority in the Ohio Building code and provide clear definitions of the types of facilities affected.

State regulation ensures consistency in compliance with the Ohio Building Code for an industry that spans the boundaries of many different municipalities, townships, counties and cities. Managing these projects in an efficient and uniform way is beneficial to the industry and helps protect the health and safety of Ohio's citizens.

This action is in response to the current extraction of natural gas and oil from Utica shale in eastern Ohio. Once natural gas and other products are removed from the shale, they must be processed at specialized processing plants. These plants remove the various hydrocarbons and fluids from raw natural gas to produce pipeline quality dry natural gas, as well as other valuable by-products. These processing plants are unique structures and will be constructed in various parts of eastern Ohio.

The Joint Committee on Agency Rule Review (JCARR) will review the rules in May with a potential effective date in June.



# CELLULAR TOWER STRUCTURE CLASSIFICATION

With the recent adoption of the 2009-based Ohio Building Code (OBC), Ohio Mechanical Code (OMC), and Ohio Plumbing Code (OPC), it is a good time to examine the interpretation of a referenced standard that seems to vary across the state. This Board of Building Standards (BBS) Memo is being issued to promote a uniform understanding of the standard and promote a consistent application of its requirements. OBC Section 3108 is succinct in its requirements and reads as follows:

## SECTION 3108 TELECOMMUNICATION AND BROADCAST TOWERS

3108.1 General. Towers shall be designed and constructed in accordance with the provisions of TIA-222. Exception: Single free-standing poles used to support antennas not greater than 75 feet (22 860 mm), measured from the top of the pole to grade, shall not be required to be noncombustible.

3108.2 Location and access. Towers shall be located such that guy wires and other accessories shall not cross or encroach upon any street or other public space, or over above-ground electric utility lines, or encroach upon any privately owned property without the written consent of the owner of the encroached-upon property, space or above-ground electric utility lines. Towers shall be equipped with climbing and working facilities in compliance with TIA-222. Access to the tower sites shall be limited as required by applicable OSHA, FCC and EPA regulations.

To be constructed in accordance with TIA-222 (*Telecommunications Industry Association – Structural Standards for Steel Antenna Towers and Antenna Supporting Structures*), each tower, among other requirements such as those that address tower locations and proximity to other structures, be classified by the designer according to its intended use and location

so as to determine load factors used in the tower's design. There are three structural classifications in the standard; Class I, Class II, and Class III structures. Each classification brings with it different nominal wind, ice, and earthquake loads.



The structural classification is established based upon two considerations: consequences of structural failure and type of service provided. Consequences of failure are based upon tower size and location that could result in low, substantial, or high hazard to human life and property. Types of services are classified as those that are optional where a delay in restoration is acceptable, those that are able to be provided by other means, and those that are essential for defense or disaster response.

**Class I:** Structures described in TIA-222 Table 2-1 as, “Structures that due to height, use or location represent a low hazard to human life and damage to property in the event of failure and/or used for services that are optional and/or where a delay in returning the service would be acceptable such as: residential wireless and conventional 2-way radio communications; television, radio and scanner reception; wireless cable; amateur and CB radio communications.”

**Class II:** Structures described as, “Structures that due to height, use or location represent a substantial hazard to human life and/or damage to property in the event of failure and/or used for services that may be provided by other means such as: commercial wireless communications; television and radio broadcasting; cellular, PCS, CATV, and microwave communications.”

**Class III:** Structures described as, “Structures that due to height, use or location represent a high hazard to human life and/or damage to property in the event of failure and/or used primarily for essential communications such as: civil or national defense; emergency, rescue or disaster operations; military and navigation facilities.”

## ***CELLULAR TOWER STRUCTURE CLASSIFICATION continued...***

Class III towers are those used primarily for national defense, military, navigation, and disaster response; consequences are more serious if the tower fails. The standard is also clear that television broadcasting, radio broadcasting, community access TV, cellular service, and microwave communications are generally provided using Class II structures, even though there may be storm alerts given or 911 calls made using these services. Because these services can be provided by other means, they should not be confused with civil or national defense, emergency, rescue, disaster operations, or military and navigation communications.

When these communications facilities are designed for services such as commercial wireless communications, television and radio broadcasting, cellular, personal communication services, community access television, and microwave communications, they are intended to be designed as Class II towers and the information submitted to the building department should reflect this classification. When building departments are unsure in their understanding of the assignment of a structural class and require that the structure comply with an incorrect class, costs for obtaining approvals, constructing, and installing these towers can be unfairly increased.

There may be situations in which towers combine emergency, rescue, disaster operations, or national defense communications with television, radio, and cellular communications services on the same tower. There may be designs of high importance structures such as emergency management communications centers, civil or national defense centers, disaster response hospitals that incorporate communication towers that need to be designed to the higher Class III requirements.

### ***A Note from the Ohio Construction Industry Licensing Board***

The Ohio Construction Industry Licensing Board (OCILB) licenses and regulates Electrical, Plumbing, Hydronics, HVAC and Refrigeration contractors who perform work on non-residential buildings.



The licensing law mirrors the Ohio Building Code. If the work being performed requires building department approval, then it requires a licensed contractor. General maintenance and repairs, which are exempt from the building code, are also exempt from licensing. Ohio Revised Code Chapter 4740 provides that a local government

may register contractors and charge a commercial contractors fee. Many local governments require a contractor license for residential contractors as well. A contractor license means the individual passed the required test, has taken the required continuing education, and carries liability insurance.

OCILB does not regulate workmanship, but should be notified if a local government revokes a contractor's registration (commercial or residential). OCILB does have authority to discipline and potentially revoke a contractor's license based on action taken by a local government through its registration requirements.

Also, please report unlicensed activity in your area, as well as failure of contractor to include license number in all advertising or fraudulent use of licenses. If you become aware of contractor license violations, please contact the OCILB Executive Secretary at 614-644-3495 or email to [carol.ross@com.state.oh.us](mailto:carol.ross@com.state.oh.us)

### **Board of Building Standards Members**

Gerry Holland, Fire Service, Chair  
Joseph Denk, Jr., Mechanical Engineer  
Timothy Galvin, General Contractor  
Robert Gilbert, Renewable Energy  
Peter Korda, Structural Engineer  
Donald Leach, Attorney  
Terrence McCafferty, Public Member  
Charles Ruma, Homebuilder  
Douglas Scholz, Industrialized Units  
Carl Schultz, III, Energy Conservation  
Bob Yost, Homebuilder

### **The Board staff is available to help you:**

Our hours of operation are: 8:00 a.m. to 5:00 p.m., Eastern Time Zone, Monday through Friday

The Ohio Department of Commerce  
Division of Industrial Compliance and Labor  
6606 Tussing Road  
P.O. Box 4009  
Reynoldsburg, Ohio 43068-9009  
Phone: (614) 644-2613  
Fax: (614) 644-3147  
TTY/TDD: 1-800-750-0750

## *Schedule of Events*

### **April 2012**

April 25 Residential Construction Advisory Committee Regular Meeting  
9:00 AM

### **May 2012**

May 6 - 9 Ohio Chapter International Association of Electrical Inspectors Annual Conference, Boardman, Ohio

May 8 Board of Building Standards OBC Administration Continuing Education Course Presented by Steve Regoli  
Sponsored by Ohio Chapter International Association of Electrical Inspectors

May 11 Board of Building Standards Regular Meeting  
10 AM

May 23 Residential Construction Advisory Committee Regular Meeting  
9:00 AM

### **June 2012**

June 2 OSPE Spring continuing Professional Development Conference – Ohio Society of Professional Engineers  
Presentation – “Codes and the Impact on Housing” – Presented by Jan Sokolnicki 4:30 p.m.

June 20 BOCONEO Monthly Meeting 1 p.m.  
Presentation – Chapter 1 Administration – Steve Regoli



#### **BBS Administrative Staff:**

Front Row (L to R): Regina Hanshaw, Debbie Ratliff, Robin Blake, Debbie Ohler, Vicky Williams

Back Row (L to R): Jan Sokolnicki, Steve Regoli, Evan Dicken, Felecia Jackson, Rob Johnson, Mike Regan, Mike Lane.