

Construction Codes Advisory Council Meeting Thursday, July 20, 2017 @ 10:00 a.m. MEETING MINUTES

Minnesota Room – Department of Labor and Industry 443 Lafayette Road North, St. Paul, MN 55155

Members:

Bob Bastianelli Mark Brunner

Jennifer DeJournett

Tom Downs Grant Edwards Tom Erdman

Bill Freitag (via teleconference)

Gerhard Guth Patrick Higgins

Mark Kincs (Gundry alternate)

Laura McCarthy

Scott McLellan (Chair)

Scott Novotny Mike Paradise Jim Smith

Gary Thaden (Gray alternate)
Dan Westberg (Novotny alternate)

Members Absent:

Larry Stevens, Jr.

Staff & Visitors

Jessica Looman – DLI
Jeff Lebowski – DLI
Suzanne Todnem – DLI
Lyndy Logan – DLI
Todd Green – DLI
Scott McKown – DLI
Rich Lockrem – DLI
Scott McKown – DLI
John Williamson – DLI
Remi Stone – BAM

John Babin – City of Savage Sophie Thaden – MMCA/MEA

David Siegel – BATC Jim Gander – PHCC

1. Call to Order

The meeting was called to order at 10:02 a.m. by Chair McLellan. Housekeeping announcements were made.

2. Introductions

Members and guests introduced themselves and a quorum was declared with 13 of 18 members present or via teleconference.

3. Approval of Previous Minutes

A motion was made by Bastianelli, seconded by Brunner, to approve the March 16, 2017, meeting minutes with the corrections shown below. The roll call vote was unanimous with 13 votes in favor; the motion carried.

Staff & Visitors:
Gary Thaden – MMCA/MEGA
Sophie Thaden – MMCA/MEGA

5. Adoption of 2017 National Electrical Code Dean Hunter, Electrical unit supervisor, gave a PowerPoint presentation titled "An overview of the National Electrical Code (NEC) adoption process" – see Attachment A. July 1, 2017 is the anticipated adoption date of the 2017 NEC. Letters supporting the adoption were received from the Minnesota Electrical Contractors—Association (MECA), the National Electrical Contractors Association (NECA), and the International Brotherhood of Electrical Workers (IBEW).

Dan McConnell joined the meeting at 10:15 a.m. bringing the number of members present or via teleconference to 14 of 18 members.

4. Division and Department Reports including legislative update – See Attachment A – CCLD Newsletter, summer 2017 edition

- A. McLellan highlighted the following:
 - a. Education offerings
 - b. Building Official Forum
 - c. Wedding Barns
 - d. 2017 national Electrical Code takes effect July 1, 2017
 - e. Rulemaking TAG workgroups 2015 and 2018 model codes both have a series of changes to be reviewed. March 2020 is the anticipated adoption date.
- B. Looman highlighted/discussed the following:
 - a. The Department of Labor and Industry has a new logo that is now shared by all State agencies.
 - b. Website being revised to make it easier for users to find what they need.
 - c. New 5 year strategic plan will be launched in September or October. Our current Strategic Plan includes work done in 2013 through 2017.

5. Legislative Update

- A. Fee reduction for license, building permit, and plan review fees.
- B. Places of Public Accommodation for areas where there is no state building inspection authority. When a qualifying space is constructed or converted that includes 200 people or more ,the department must inspect the construction project. View the Factsheet on our website at: http://www.dli.state.mn.us/CCLD/PDF/fs_accom.pdf
- C. Contractor Recovery Fund the cap limit per contractor for failure to perform was raised to \$300,000 from \$150,000.
- D. High Pressure Piping Systems References in 326B were changed to Journeyworker from Journeyman.

- E. Authority granted for expedited rulemaking to eliminate Residential Fire Sprinkler systems in two-unit townhouses. For more information, please visit: http://www.dli.state.mn.us/CCLD/PDF/errata 1309 0313.pdf
- F. Funding for a new Youth Skills Training Program to enhance career exposure in a number of different industries.
- G. Wage theft received \$1 million to assess and create strategic plan to address wage theft in Minnesota. Estimate there are 40,000 victims resulting in approximately \$9M annually in lost wages.
- H. Minimum wage new legislation for local government. In addition, as of January 1, 2018, there will be a new minimum wage for the State of Minnesota.

6. Next meeting

The next meeting is tentatively scheduled for September 21, 2017.

7. Adjourn

The meeting adjourned at 11:04 a.m.

Respectfully Submitted,

Lyndy Logan

Executive Secretary, Construction Codes and Licensing Division Department of Labor and Industry

CCLD REVIEW

Save the date: CCLD fall seminars begin Sept. 20, 2017

Courses offer continuing education units, conducted at eight Minnesota locations

The Construction Codes and Licensing Division's (CCLD) fall seminar, IBC Chapter 7: Smoke and Fire Protection; Commercial Mechanical Inspections and Commercial Plumbing Inspections, begins Sept. 20, 2017, and is offered at eight locations throughout Minnesota. Registration will open in August and be available at www.dli.mn.gov/ccld/education.asp.



Morning sessions:

- Session one (7:30-9:10 a.m.) IBC Chapter 7: fire-resistant-rated construction and wall types; penetration protection and opening protection.
- Session two (9:30-11:10 a.m.) IBC Section 714: radiation dampers, smoke dampers, fire dampers, combination damper: When are they required and why? What to look for at inspection.

Afternoon sessions:

- Session three (noon-1:40 p.m.) Mechanical field inspection: The session reviews the field inspections pertaining to a economizer installation with a square footage exceeding 500 sq. ft. Discussion will include components of the energy code, mechanical code and fuel gas code incorporated into the installation.
- Session four (2-3:40 p.m.) Plumbing field inspection: Basic commercial plumbing inspections, from the ground work up. Inspection advice from the field.

Where:

- Sept. 20, 2017 Fergus Falls, Bigwood Event Center
- Sept. 21, 2017 Bemidji, South Shore Conference Center (Hampton Inn)
- Sept. 26, 2017 St. Cloud, Sterling Catering (Best Western Kelly Inn)
- Sept. 27, 2017 Carlton (Duluth area), Black Bear Casino
- Oct. 3, 2017 Redwood Falls Community Center
- Oct. 12, 2017 Owatonna, Holiday Inn
- Oct. 17, 2017 Burnsville, Nicollet Inn (Best Western)
- Oct. 18, 2017 Vadnais Heights, Jimmy's

Seminars include eight CEUs for building officials

Continuing education: This seminar is approved for eight hours of continuing education for certified building officials and building officials-limited. Content is specific to health, safety and welfare of the public.

Cost: \$85 payable by credit card. Includes lunch. Payment must be received at least seven days before the course.

Register: Registration will be available beginning in August at www.dli.mn.gov/ccld/education.asp.

Building Official Forum is July 28, 2017

The third-annual Building Official Forum includes legislative updates, an explanation of the new State Building Code development process and a presentation about minimum municipal code enforcement.

• **When:** 9 a.m., July 28, 2017

• Where: The Inn on Lake Superior, Duluth, Minn.

• **Cost:** Free, registration required

• Continuing education: 2.5 CEUs for building officials

• **Register:** www.dli.mn.gov/ccld/education.asp

Additional area educational opportunities include:

- **Annual Institute for Building Officials**: Jan. 4-12, 2018 http://cce.umn.edu/annual-institute-for-building-officials
- **2018** ICC Upper Great Plains Region III Educational Institute: Feb. 12-16, 2018, www.iccsafe.org/Training
- Energy Design Conference and Expo: Feb. 19-21, 2018, www.DuluthEnergyDesign.com

Same department. New look.

The Minnesota Department of Labor and Industry launched a new logo on our website, social media and emails.

The new logo is part of a statewide branding effort of all state agencies, boards and commissions to strengthen our shared identity as the State of Minnesota.



While many of our items include the new logo and branding already, other products like some printed items and forms will be updated when it's time for reordering or replacement.

The change to a unified State of Minnesota brand will make it easier for residents, visitors and business partners to identify the many services state agencies provide across the state. It is the state's goal that this new brand be seen as the mark of high-quality work, done on behalf of all Minnesotans

Read more about the statewide branding initiative at https://mn.gov/portal/brand/.

CCLD Review is a quarterly publication of the Minnesota Department of Labor and Industry.

Receive email notification when an issue is available by subscribing online.

Contact information

CCLD main contact info

Phone: (651) 284-5012 Toll-free: 1-800-657-3944 Fax: (651) 284-5746

Visit the Contact Us page

Licensing information

DLI.License@state.mn.us

Business/contractor licenses and bonds: (651) 284-5034 (Including: electrical, HPP, plumbing, residential, manufactured structures, mechanical bonds, technology system,

water conditioning)

Personal licenses and certificates: (651) 284-5031 (Including: boiler engineers, electricians, plumbers, power limited technicians, pipefitters, unlicensed individuals, building officials)

Electrical information

Phone: (651) 284-5026 Fax: (651) 284-5746 DLI.Electricity@state.mn.us

Boiler, high-pressure piping, boats-for-hire inspection

Phone: (651) 284-5544 Fax: (651) 284-5737 DLI.Code@state.mn.us

Plumbing information

Phone: (651) 284-5063 Fax: (651) 284-5748 DLI.Plumbing@state.mn.us

License enforcement details

Phone: (651) 284-5069 Fax: (651) 284-5746 DLI.Contractor@state.mn.us

Contractor registration

Phone: (651) 284-5074 DLI.register@state.mn.us

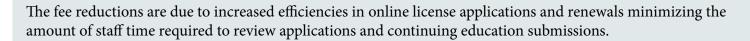
DLI reduces license fees for second time since 2015

Beginning July 1, 2017, fees for licenses issued by DLI's Construction Codes and Licensing Division (CCLD) will be reduced by 15-25 percent. The change marks the second reduction in fees since 2015.

CCLD operates on a fee-for-service basis with no contributions from the state's general fund. As a result, we try to align fees with the cost of providing services. Fees are for a two-year license cycle and do not include a \$5 continuing education surcharge or \$4 board fee, if applicable).

Fee reductions by license category are:

- journey license reduced from \$35 to \$30
- master license reduced from \$75 to \$60
- business license reduced from \$160 to \$120



New law reimburses license fees for veterans

Beginning July 1, 2017, all of Minnesota's veterans of active military duty, and those who have served in the National Guard or Reserves for five years or more, are eligible for reimbursement for a range of costs they incur to obtain and maintain professional licenses up to the age of 62.

This new benefit is a result of changes to the Minnesota GI Bill and expands educational benefits already available to many military veterans. It will enable eligible veterans to apply for reimbursement for DLI license and exam fees with a lifetime benefit maximum of \$10,000.

Learn more:

For more information about the new licensefee benefit, contact the Minnesota Department of Veterans Affairs at 1-888-546-5838.

State inspection of public assembly spaces in non-building code enforced areas

A new law addresses public safety by requiring a state inspection of construction, additions or alterations to public assembly spaces designed for 200 or more people in areas where there is no local building code inspection.

As of July 1, 2017, DLI will review architectural and engineering plans, issue permits and inspect the construction

of public assembly spaces designed as sports or entertainment arenas, stadiums, theaters, community or convention halls, special event centers, indoor amusement facilities or water parks, or indoor swimming pools.

Questions?

Contact Scott McKown, Construction Codes and Licensing, at (651) 284-5893 or scott.mckown@state.mn.us.

Plans or applications submitted for local government landuse approval **in non-building code enforced areas** on or after July 1, 2017, must be submitted to DLI for building code review and approval before construction begins on a public assembly space.

New fire sprinkler amendments are in effect

Effective June 5, 2017, Minnesota Rule 1309.0313 was amended and published in the State Register to establish that neither one- and two-family dwellings, nor two-unit townhouses, are required to have automatic fire sprinkler systems installed under Minnesota's Residential Building Code.

'Wedding barns' and the Minnesota State Building Code

Q. Existing barns have become a popular venue for weddings, receptions, family reunions and similar gatherings. What are the main building code issues I should be concerned with?

As an existing building, the requirements of the Minnesota Conservation Code for Existing Buildings applies. In most instances, this would constitute a change of use as the barn was likely a group U agricultural occupancy and exempt from the State Building Code (Minn. Rules 1300.0030 subp. 2). The new use would most likely be considered an assembly occupancy.

- **A.** The main code considerations that may arise from this change of use are:
 - Requirement for an automatic sprinkler system.
 - Accessibility (parking, access to the building, restrooms and elevator or lift to provide access to elevated floors or stories).



When re-purposing an existing barn for weddings, receptions and related uses, the requirements of the Minnesota Conservation Code for Existing Buildings applies.

- Minimum number of toilets, lavatories and drinking fountains.
- Structural most barns were never designed for assembly use. If it was exempt from the State Building Code, there is a good chance that the snow and wind loads required for commercial buildings was not considered.
- Exit width, number of exits, door swing and panic hardware.
- Exit signs and emergency illumination.
- Fire detectors, both manual and automatic.
- Allowable area and height based on the type of construction and occupancy classification.

High pressure piping licenses will be renamed

Effective Aug. 1, 2017, two high pressure piping license types will be renamed for consistency within the construction trades. The current "contracting high pressure pipefitter" license will be renamed to "master high pressure pipefitter." "High pressure pipefitting business" license will be renamed to "high pressure pipefitting contractor."

These changes will help alleviate confusion between the personal and business license types and is consistent with current electrical, elevator and plumbing personal and business licenses. Qualifications for the master and contractor licenses remain unchanged.

Board of High Pressure Piping Systems considering adoption of model code

The Board of High Pressure Piping Systems is reviewing the latest national model codes for possible adoption. The IIAR and ASME standards that make-up the current Minnesota code for ammonia refrigeration piping, steam or heating media piping systems, bioprocess piping, and the welding requirements for each have undergone two or more revisions since the most recent code adoption in 2013. The rulemaking docket with contact and comment information is at www.dli.mn.gov/PDF/docket/5230docket-ref.pdf.

Enforcement actions: Building contractor fined \$10,000

• In April, DLI revoked the residential building contractor license of an Eagan, Minn., contractor and assessed a \$10,000 fine based on its failure to pay its subcontractors and suppliers, satisfy judgments, correct building code violations and cooperate with requests for information from the local building official and DLI. The contractor was also ordered to cease and desist from acting as a residential building contractor in Minnesota.



Enforcement actions
View enforcement and
license actions levied
against licensees.

- In April, an unlicensed contractor from Superior, Wisconsin, was ordered to cease and desist from unlicensed residential building contractor activity in Minnesota and fined \$7,000.
- An unlicensed plumbing contractor from Clara City, Minnesota, was ordered to cease and desist from plumbing contracting and fined \$5,000. In 2014 the contractor entered into a consent order with DLI that included a stayed fine. Due to the new infractions, the stay was lifted and an additional penalty of \$2,500 was assessed.
- A technology systems contractor from Willmar, Minnesota, was fined \$10,000, ordered to cease and desist from all unlicensed activity and to comply with the statutes and rules regulating electrical contracting. The contractor was engaged in unlicensed technology systems contracting. The contractor also failed to register its unlicensed employees with DLI and failed to ensure those unlicensed employees were properly supervised when performing electrical work. Additionally the contractor permitted unlicensed or unregistered non-employees to perform electrical work on its behalf.

Summaries of all final CCLD enforcement actions are available at www.dli.mn.gov/CCLD/Enforcement.asp. Questions about specific enforcement actions should be directed to (651) 284-5069 or DLI.contractor@state.mn.us.

'Building types' added to Building Permit Surcharge Report

Either quarterly or monthly, Minnesota municipalities submit building permit surcharge reports to DLI.

Starting July 1, 2017, DLI's Building Permit Surcharge Report will include a new section for tracking building types. Municipalities will be required to enter the number of permits, individual units and valuation for new one-and two-family dwellings, townhouses, multifamily, commercial, industrial and institutional building types when completing the report.

Collecting this information from all code-enforcing municipalities enables DLI to comprehensively and accurately track construction activity by year and building type throughout the state. Annually, DLI will summarize the data and make it available in ways that can be helpful to local governments to plan workforce trends and compare their activity with neighboring communities. As part of the data-

Questions?

Contact Cindy Chapel, Construction Codes and Licensing Division, at (651) 284-5411 or cynthia.chapel@state.mn.us.

Read more about the Building Permit Surcharge Report at www.dli.mn.gov/CCLD/Surcharge.asp.

collection change, a similar question found in the annual Municipal Fee and Expense Report will be removed.

Water conditioning industry affected by new legislation

A broadened scope of work and a registration requirement are included in new law

A new law expands the scope of work that licensed water conditioning contractors and their employees are able to perform and adds a requirement that unlicensed individuals performing water conditioning installation and servicing must register with DLI.

Beginning July 1, 2017, licensed water conditioning contractors can install and service water conditioning systems for which the initial water source connection was established by a licensed plumbing contractor in multi-family residential buildings and commercial buildings, as long as the licensed plumber installed a readily accessible isolation valve and the piping of the system is less than 2-inch nominal pipe size.

Additionally, unlicensed employees of a licensed water conditioning contractor must register with DLI as a registered water conditioning installer. After July 1, 2017, it will be unlawful for a water conditioning contractor to employ unregistered water conditioning installers. The work experience of unregistered individuals cannot be credited toward the six-month experience requirement for an individual to take a water conditioning journeyworker exam. In addition, unlicensed individuals must be directly supervised at all times by a licensed plumber or water conditioning journeyworker or master.

The annual fee for registering as an unlicensed water conditioning installer is \$14, with registrations expiring on June 30 of each year, regardless of when the initial application was approved.

Plumbers: Start thinking about continuing education for license renewal

All current journey and restricted journey plumber licenses expire Dec. 31, 2017. Although this may seem a long way off, licensed plumbers must complete 16 hours of DLI-approved continuing education (CE) to renew their licenses. If you haven't completed 16 hours, we encourage you to start looking for courses to make sure you're finished before renewing your license. Renewing a license without first completing the required CE is illegal and has resulted in enforcement actions and fines against plumbers in the past.

Of the required 16 hours of CE, at least 12 hours must pertain to the Minnesota Plumbing Code and at least four hours must pertain to technical topics related to plumbing installations and equipment, the Minnesota State Building Code or the Minnesota statutes governing plumbing work. No more than four hours can be completed online in each license period. CE course sponsors report attendance directly into our licensing system, so you do not have to send us documentation of your attendance.

Plumbers who have more than one type of license can apply their CE courses to all of their licenses – only the number of hours required for the license with the highest CE requirement must be fulfilled.

Medical gas installer certification holders who obtained their certification from DLI after Nov. 27, 2012, must complete four hours of CE to renew their certification. Approved CE courses that fulfill the medical gas requirements may also be used to fulfill the plumber renewal requirement.

Questions?

• CE course directory: https://secure.doli.state.mn.us/ccldcecourses/

Web: www.dli.mn.gov/CCLD/pe ce.asp

• Email: DLI.license@state.mn.us

• Phone: (651) 284-5031

Plumbing Code requirements for emergency eyewash stations and showers

The 2015 Minnesota Plumbing Code requires the installation of emergency eyewash and shower equipment to comply with ANSI/ISEA Z358.1 (see the 2012 Uniform Plumbing Code, Section 416.0, as adopted in Minnesota Rules, Chapter 4714).

Water supply

- **Supply flow rate:** Emergency eyewash and shower equipment must not be limited by the water supply flow rates. Flow rate, discharge pattern and temperature of flushing fluids must be provided based on the hazardous material (ISEA Z358.1). Eyewash units must provide a minimum flow rate of 0.4 gallons per minute (gpm) for 15 minutes and shower units must provide a minimum flow rate of 20 gpm for 15 minutes.
- **Temperature:** Tepid flushing fluid must be delivered to enable an injured worker to remain under the drench shower or wash their eyes for 15 minutes. The acceptable temperature range for flushing fluid is 60°-100°F. It cannot be too hot, which could accelerate a chemical reaction, or too cold, which could be uncomfortable and

dissuade an injured worker for using the equipment as long as required. Standard ASSE 1071 sets performance requirements for temperature-activated mixing valves used in conjunction with emergency equipment. These valves are designed to reduce or shut off the flow of water when incoming cold water is interrupted so as not to allow scalding water to reach the safety fixtures. If the incoming hot water runs out or fails, cold water will continue to flow through the valves.

Minnesota OSHA (MNOSHA) is the authority for specific workplace safety. Designers must also comply with MNOSHA for compliance with ISEA Z358.1 for the chemicals or hazards and required temperatures for the specific project.



• **Backflow protection:** To prevent cross contamination, the water supply line to the emergency drench hose or eye wash unit must be protected against backflow with an approved backflow preventer rated for high-hazard applications.

Waste connection

- **Discharge of emergency eyewash units:** If the water supply for the emergency eyewash extends through the bowl and inside the waste piping, the eyewash must discharge indirectly to the sanitary sewer. If the water supplies to the eyewash do not extend up through the bowl, but rather the supplies wrap around the sides or extend horizontally through the top of the bowl rim above the spill line, then the eyewash may connect directly to the waste system.
- **Drain:** A drain is not required for emergency eyewash or shower equipment.

Location

Accessibility: Emergency eyewash and shower equipment must be located on the same level as the hazard
and accessible for immediate use. The path of travel must be free of obstructions and clearly identified with
signage.

Questions?

- DLI Plumbing Plan Review: (651) 284-5067, www.dli.mn.gov/ccld/Plumbing.asp
- Minnesota OSHA: (651) 284-5050, osha.compliance@state.mn.us
- Emergency eyewashes and showers handout: www.dli.mn.gov/osha/PDF/emergency eyewashes showers.pdf

2017 National Electrical Code takes effect July 1, 2017

The Minnesota Board of Electricity adopted the 2017 National Electrical Code (NEC) when it published the Notice of Adoption in the State Register on June 19, 2017. The effective date is July 1, 2017. Therefore:

- Electrical permits filed before July 1, 2017, must comply with the 2014 NEC.
- Electrical permits filed on or after July 1, 2017, must comply with the 2017 NEC.

Electrical permits are required to be filed at or before commencement of an electrical installation.

Purchase or view the 2017 NEC:

- Purchase from National Fire Protection Association (NFPA): http://catalog.nfpa.org/NFPA-70-National-Electrical-Code-NEC-Softbound-2017-Edition-P16529.aspx
- View for free at www.nfpa.org/freeaccess (must create a free NFPA account for access)
- Purchase from Minnesota's Bookstore: https://www.mnbookstore.com/building-codes.html

For more information

- 2017 NEC adoption rulemaking docket: www.dli.mn.gov/PDF/docket/1315 2017docket.pdf
- Minnesota Rules, Chapter 1315: https://www.revisor.mn.gov/rules/?id=1315
- Board of Electricity: www.dli.mn.gov/Boe.asp
- Electrical information from DLI: www.dli.mn.gov/CCLD/Electrical.asp

Comments sought for 2020 edition of NEC

The NFPA is accepting public input about the 2020 edition of the National Electrical Code. To submit comments about the 2020 edition of the standard, visit www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/mode=code&code=70&tab=nextedition.



Electrical staff present at NCEES event

Dean Hunter, DLI supervisor, presented April 18, 2017, at the North Central Electrical Engineering Society (NCEES) meeting in Bloomington, Minnesota, about significant changes in the 2017 National Electrical Code (NEC). NCEES is an affiliate under the North Central Electrical League.



Inspectors learn about NEC changes

Minnesota's annual electrical inspector meeting was April 28, 2017, at the Minneapolis Electrical Joint Apprenticeship Training Center in St. Michael, Minnesota. The event brings together Minnesota's contract electrical inspectors, electrical area representatives and department staff. The topic of the meeting was a review of the changes found in the 2017 National Electrical Code.