CCLD Review
Construction Codes and Licensing Division
Minnesota Department of Labor and Industry
Summer 2013

Legislative changes affect construction codes

CCLD changes during the 2013 legislative session affect plumbing, elevators, charter schools, wind farms and others. Article 2 of Chapter 85 of the 2013 Session Laws is available from the Office of the Revisor of Statutes. Some of the more notable changes include:

Plumbing Inspection fee schedule

Section 326B.49 subd. 3. Inspection fees, is replaced with a different inspection fee schedule. The previous fee schedule was based on ranges of drainage fixture units with a cap of $1,800. The new fee schedule is primarily based on the number of fixtures installed and does not limit the total fee.

When compared to the previous fee schedule, this schedule results in a more equitable fee. Under the previous fee schedule, small projects had a minimum $300 inspection fee. Under the new fee schedule, a small project could have a fee as little as $125. The new fee schedule also eliminates the $300 jump in fees when the drainage fixture unit total would move to the next range. Effective July 1, 2013. View more information about the change at www.dli.mn.gov/CCLD/PDF/pe_inspection_notice.pdf.

Accelerated plumbing plan review

Section 326B.49 Applications, Fees. Subd. 2(10), providing for an accelerated plan review is deleted effective Jan. 1, 2014. As part of its strategic plan, DLI is committed to completing plan reviews in a timely manner for all submissions, not only those submitted under the accelerated plan review provision.

Plumbing plan review submission

Section 326B.43 Plumbing Standards; Rules; Agreement with Municipality; Exception. Subd. 2(n) was amended to clarify the types of facilities required to have plans and specifications submitted to DLI.

The list of health care facilities was replaced with "state-licensed facilities as defined in section 326B.103, subd. 13" and the reference to "buildings owned by the federal or state government" was replaced with "public buildings as defined in sections 326B.103, subd. 11." These changes clarify the types of projects required to have the plan review performed by DLI and clarifies when the agency is the plumbing inspection authority. Effective July 1, 2013. Read more about plumbing plan review on page 3.

The Minnesota State Capitol building. Recent legislative changes affect the construction codes in Minnesota.

Elevator licensing, inspection changes

Sections 326B.163 to 326B.191 were amended to include new elevator licensing requirements.

Elevator contractors and elevator constructors were previously licensed under sections 326B.31 to 326B.399 that make up the Minnesota Electrical Act. The changes result in the elevator license requirements amended and relocated to sections 326B.163 to 326B.191 relating to elevators. In addition to being relocated, the changes require elevator licenses be based on both elevator and

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electrical code and technology. Changes to the licensing requirements became effective July 1, 2013.

2013 Session Law Chapter 85 also includes a change to the elevator permit and inspection fee schedule found in Minnesota Rules 1307.0032. Under the current schedule, the inspection fee is based on the valuation of the elevator installation and is capped at $1,000. In addition to eliminating the $1,000 cap, the hourly rate for inspections will increase from $45 to $80. The fee schedule will also be moved to section 326B.184. These fee changes and the fee schedule moving to section 326B.184 become effective Jan. 1, 2014.

An unofficial version of sections 326B.163 to 326B.191 and more details about the licensing and inspection changes are available at www.dli.mn.gov/ccld/elevator.asp.

Charter schools jurisdiction

Section 326B.103 Definitions, subd. 11. Public building. “Public building” means a building and its grounds the cost of which is paid for by the state or a state agency regardless of its cost, and a school district building project or charter school building project the cost of which is $100,000 or more.

Effective July 1, 2013, charter school building projects valued at $100,000 or more must be submitted to CCLD, similar to other state construction projects regulated by Minnesota Rules 1302. CCLD will retain code administration authority on all charter school projects meeting the definition of a public building for purposes of plan review, permitting and inspection unless the project is delegated to the local building official through the normal delegation agreement process.

For charter school projects valued at less than $100,000 in construction value, code administration is the responsibility of the local building official or building department. View more details at www.dli.mn.gov/ccld/pdf/charter_school.pdf

Building code applies to use of a building

Minnesota Statutes Section 326B.101 Policy and Purpose. The State Building Code governs the construction, reconstruction, alteration, ~~and~~ repair, and use of buildings and other structures to which the code is applicable.

This is an important change and clarifies that the building code applies to how buildings are used, including when the use changes. Section 326B.121, subd. 1 includes a similar change. An example of this change and the building code applying to a building’s use is when an existing retail unit in a multiple occupancy building is remodeled into a restaurant. Another example could be when a building used as a bank is remodeled to be used as a dental clinic. Effective July 1, 2013.

Wind farm inspections

Section 326B.37 Inspection Fee Schedule. Subd. 15. Utility interconnected wind generation installations. This is a new subdivision in the electrical inspection fee schedule that provides an alternative for calculating inspection fees for large wind farm installations. Read more about this change on page 6. Effective July 1, 2013.

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Plumbing plan review and inspection requirements

Regardless of whether a municipality has a formal plan review agreement with DLI, some plumbing plan reviews and inspections must always be performed by DLI.

Municipalities with plumbing plan review agreements

Plan review: In accordance with section 326B.43, subd. 2(n), municipalities that have a formal plumbing plan review agreement with DLI may perform plumbing plan reviews with the exceptions listed below. **The following plumbing plans must be submitted to DLI for review:**

1. **(Type I)** State-licensed facilities as defined in section 326B.103, subd. 13, states, "State licensed facility" means a building and its grounds that are licensed by the state as a hospital, nursing home, supervised living facility, free-standing outpatient surgical center, correctional facility, boarding care home or residential hospice.

2. **(Type II)** Public buildings as defined in section 326B.103 subd. 11, which was amended and passed in 2013 legislation as: "Public building" means a building and its grounds the cost of which is paid for by the state or a state agency regardless of its cost, and a school district building project or charter school building project the cost of which is $100,000 or more. Examples of these types of facilities include public schools, state colleges, Minnesota Department of Transportation, Department of Natural Resources and similar facilities.

3. **(Type III)** Projects of special nature for which DLI review is requested by either the municipality or the state. These projects are all dialysis facilities and all charter school and independent school district projects not covered in Type II.

Inspections: The plumbing inspections for those facilities may be conducted by the municipality if the inspections are performed by inspectors who are licensed master or journeyman plumbers. In municipalities where plumbing inspections are not performed by licensed plumbers, DLI staff members will inspect the facilities.

Municipalities with no plumbing plan review agreements

Plan review: Unless a plumbing plan review agreement exists between DLI and a municipality, all plumbing plans and specifications for public and commercial types of facilities must be submitted to DLI for review and approval prior to installation. DLI reviews plumbing plans for all of the following types of facilities including yet not limited to:

1. Assisted living facilities, restaurants, coffee shops, grocery stores, gas stations, liquor stores, hotels or lodges, retail malls, office buildings, dental offices, warehouses, churches, all schools, apartments (including residential housing with five units or more built to IBC, and similar facilities.)

2. All facilities listed above under Types I, II and III.

Inspections: The plumbing inspections for facilities listed under Item 1 may be conducted by the municipality if the inspections are performed by inspectors who meet the competency requirements established in section 326B.135, or are licensed master or journeyman plumbers.

The plumbing inspections for facilities listed in Item 2 (types I, II, and III) are performed by DLI staff members.

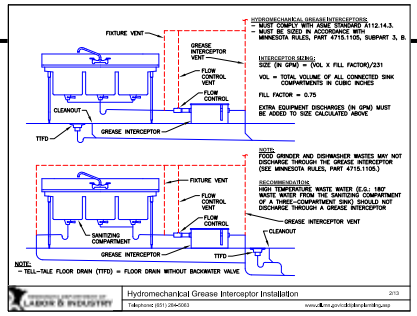
Non-code enforced areas: For non-code enforced areas, DLI will perform all commercial, licensed and public plumbing plan reviews and all plumbing inspections.

Resources

Plumbing handouts available online

A selection of plumbing informational sheets and handouts were recently added to DLI's website. Topics include kitchen items, fixtures, sand and flammable interceptors and more.

Visit www.dli.mn.gov/ccld/checklists.asp to view the files.



Two CCLD seminars scheduled for fall '13

IAEI Significant Changes to the 2014 National Electrical Code

This seminar – scheduled for three metro and three outstate Minnesota locations – will focus on the articles and sections of the 2014 National Electrical Code (NEC) that have been substantially altered from the 2011 edition.

Instructors will explore the substantiations for the changes and integrate them into a more thorough understanding of the applicable code requirements.

In addition to demonstrating the need for the modifications, the presenters will turn the most complex information into a logical, interactive seminar session.

The Life of a Boiler

This seminar – scheduled for three outstate Minnesota locations – will focus on the life of a boiler starting with the construction requirements for boilers in Minnesota and cover jurisdictional authority, state or local building official.

Curriculum will include new boiler installations and testing requirements, operation of existing boilers, repairs to existing boilers and alteration requirements.

The seminar will also include the requirements for natural gas fuel trains, combustion air, venting, piping, valves, safety valves, controls, safety devices, testing and compliance.

Details for both seminars – including continuing education credit, dates and locations – are available at www.dli.mn.gov/ccld/education.asp.

Additional educational opportunities slated for 2014

The Annual Institute for Building Officials will be conducted Jan. 8 to Jan. 23, 2014, at the University of Minnesota, St. Paul Campus.

The ICC Upper Great Plains Region III Educational Institute is scheduled for Feb. 2 to Feb. 7, 2014, at the Oak Ridge Conference Hotel in Chaska.

More information

Read more about each event, including dates, directions and how to register.

- Annual Institute for Building Officials
- ICC Upper Great Plains Region III Educational Institute

Locate inspectors quickly

Find code requirements in one place

DLI has a one-stop "Local Code Lookup" – online at http://workplace.doli.state.mn.us/jurisdiction – to help contractors and homeowners find local code requirements and code inspectors.

The online search tool helps users find which code authority has local jurisdiction for permits, plan review and inspection in the areas of boilers, building codes, electrical, elevators, high-pressure piping, plumbing or other Minnesota construction codes and licensing disciplines.

DLI's Local Code Lookup helps homeowners and contractors find local code requirements and inspectors in one place.

Workforce changes

DLI's Building Plan Review section adds new employee

As part of a three-step initiative to reduce the turnaround time between document submittal and plan review, CCLD's Building Plan Review unit has added an additional plan reviewer.

Ryan Rehn is the newest member of the Building Plan Review unit. He was previously with the city of St. Paul and brings a wealth of knowledge gained by the variety and complexity of projects he reviewed while with the city. Rehn may be contacted at ryan.rehn@state.mn.us or (651) 284-5410.

View the full Construction Codes and Licensing Division's contact directory online at www.dli.mn.gov/CCLD/CCLDContactUs.asp.

Enforcement actions

White Bear Lake residential contractor fined $34,000

Some recent CCLD enforcement actions include:

Enforcement actions
View enforcement and license actions taken against licensees.

- In April 2013, the agency revoked the license of a residential building contractor from White Bear Lake who failed to make payments to subcontractors, falsified lien waivers and failed to cooperate with DLI's investigation. The contractor was also ordered to cease and desist from acting as a residential building contractor and fined $34,000.
- Also in April, an unlicensed residential building contractor from Woodbury was found to have contracted to perform a remodeling project, which he later abandoned after performing some poor quality work. The agency ordered him to cease and desist from acting as a residential contractor and fined him $26,000.
- An unlicensed lighting company from Utah was ordered to cease and desist from unlicensed electrical work and fined $4,500.
- An unlicensed contractor from Minnetonka was fined $4,000 and ordered to cease and desist from performing electrical, plumbing and residential contractor work.

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.

Consumers

Reminder: Homeowners have options when signing contract

In 2012, DLI successfully sought changes to the state's home solicitation laws requiring home improvement contractors to provide a three-day right-to-cancel. A contract may be canceled within three days in cases where the contractor makes the first contact with the homeowner.

If a contractor offers a contract to perform repair work, the contract must include language that explains the homeowner's right-to-cancel the contract within three business days of signing it.

Similarly, any contract for roof repairs that are expected to be covered by an insurance policy must include a provision that allows the contract to be cancelled if the insurance company denies the claim. Visit www.dli.mn.gov/ccld/RBCconsumer.asp for more information.

New options for wind farm electrical inspections

Minnesota Statutes Section 326B.37 (Electrical Inspection Fee Schedule) was revised by the 2013 Legislature to allow wind farm installers two options for calculating electrical inspection fees.

The first option is to use the traditional method of calculating inspection fees based on the size and quantity of tangible components of the electrical system – generators, power sources, feeders, branch circuits, transformers, technology circuits or systems, grounding, systems more than 600 volts and so on.

The new alternative "plan review/limited inspection" option includes a plan review and an associated plan review fee, and a set inspection fee for each wind tower. The plan review fee is based on 65 percent of the valuation of the electrical installation related to one typical tower in the proposed wind farm, not including the supporting tower or other nonelectrical equipment. This fee is similar to the typical plan review fee that is assessed for a building permit application.

In addition to the plan review fee, there is a set electrical inspection fee of $80 for each individual wind tower, including any voltage matching transformers located at the tower, plus the inspection fees for the feeders that interconnect the individual towers to the utility's electrical grid.

The primary purpose of a wind farm is to produce electricity that can be added to the electrical grid, not to consume or take electricity from the electrical grid. Consequently, there usually is no "utility electrical service" for a wind farm or for individual wind towers, unlike a typical premises that derives power from the grid and has a (metered) utility-supplied electrical service that constitutes the interconnection between the facilities of the serving electrical utility and the premises wiring system (i.e. service point). Because of that, there is no electrical service inspection fee for the wind farm or individual towers.

The intent for this revision in the electrical inspection fee schedule is to provide an alternative method of calculating inspection fees. With either option, the resulting calculated inspection fees need to be reasonable and defendable, yet adequately offset the cost of providing the electrical inspection service.

Another benefit of the plan review or limited inspection model is more universal design acceptance, enabling designs and methods to be approved well in advance rather than at the installation phase.

Conducting plan reviews in this manner is a new endeavor for DLI's electrical inspection unit – the exact process and procedures will be developed as it moves forward. Installers are encouraged to contact the electrical inspection unit in advance of any proposed wind farm projects if they desire to use the new method for calculating electrical inspection fees.

Stay in touch

- Follow DLI on Twitter at www.twitter.com/mndli
- Subscribe to DLI's RSS feed to be instantly notified of news at www.twfeed.com/atom/mndli
- View DLI's YouTube channel at www.youtube.com/user/mndli1
- Sign up for other DLI newsletters focusing on workers' compensation, OSHA and more at www.dli.mn.gov/publications.asp

Electrical experience

CCLD reviews construction electrician programs

Since August 2012, CCLD has been working with instructors, program directors and deans of technical colleges to review the curriculums of the many construction electrician programs in Minnesota, North Dakota, South Dakota and Iowa.

Minnesota Statutes 326B.33, subd. 2, paragraph (b), and 7, paragraph (b) allows an applicant for a Class A journeyman electrician, power limited technician, or maintenance electrician license to be granted one year of experience credit for the successful completion of a two-year, post-high-school electrical course approved by DLI.

Electrical courses at the technical colleges listed in the chart at right have met the required criteria and their graduates qualify for the one-year experience credit.

School name	Location
Anoka Technical College	Anoka, Minn.
Dakota County Technical College	Rosemount, Minn.
Dunwoody College of Technology	Minneapolis, Minn.
Hibbing Community College	Hibbing, Minn.
Leech Lake Tribal College	Cass Lake, Minn.
Minnesota State Community and Technical College	Wadena and Moorhead, Minn.
Minnesota West Community and Technical College	Jackson and Canby, Minn.
North Dakota State College of Science	Wahpeton, N.D.
Northeast Iowa Community College	Calmar, Iowa
Northwest Iowa Community College	Sheldon, Iowa
Northwest Technical College	Bemidji, Minn.
Ridgewater College	Willmar, Minn.
Riverland Community College	Owatonna, Minn.
St. Cloud Technical & Community College	St. Cloud, Minn.
St. Paul College	St. Paul, Minn.

Technology circuits

Important information for power limited technicians

The term "technology circuits or systems" is defined in Minnesota Statutes section 326B.31 and includes class 2 or class 3 wiring for, but not limited to: remote control, signaling, control, alarm, audio signal, communication, antenna systems and indoor lighting and outdoor landscape lighting systems operating at 30 volts or less.

A power limited technician (PLT) is a person having the necessary qualifications, training, experience, and technical knowledge to install, alter, repair, plan, lay out, and supervise the installation, alteration and repair of electrical wiring, apparatus and equipment for technology circuits or systems.

However, the PLT license is not a stand-alone license. PLTs are only permitted to perform work when they are IRS W2-type employees of a licensed contractor or employer.

Technology system work is required to be performed by employees of companies licensed by DLI as technology system or electrical contractors. Additionally, licensed PLTs may perform technology system work on property owned or leased by their employer when the employer is registered with the agency.

More information

- Technology system contractor license application packets
- Employer registration packets

Unlicensed individuals may perform technology system work when working under the supervision of a PLT when both are employees of the same employer.

- Individual registration forms

Important rules for bulk storage fuel dispensers

When motor fuel dispensers are installed in conjunction with motor fuel bulk storage, National Electrical Code (NEC) Articles 501 (Class 1 Locations), 514 (Motor Fuel Dispensing Facilities) and 515 (Bulk Storage Plants) all apply, in addition to other specific or general articles in the NEC.

In accordance with NEC 515.10, when a bulk fuel storage facility also incorporates dispensing of gasoline or other volatile flammable liquids, the electrical installation must comply with the applicable rules in NEC Article 514.

Installers also need to be aware that the Minnesota Pollution Control Agency mandates that above ground storage tanks of 1,100 gallons or more installed after Nov. 2, 1998, must have secondary containment. Acceptable containment systems include:

- a minimum of 12 inches compacted clay
- a geo-synthetic clay liner
- concrete
- a synthetic membrane
- the outer layer of a double-walled tank
- fabricated steel
- fiberglass

Unlike typical classified locations identified in the NEC, bulk storage facilities that incorporate dispensers are considered nontypical, and the boundaries of the hazardous (classified) locations for such installations must be determined by a registered professional electrical engineer. The length of the dispenser hose will be considered when determining the boundary of the hazardous area. The space outside of the containment wall will also be included in the hazardous area if the dispenser hose could be extended over the containment dike wall to dispense motor fuel. In a worst-case scenario, the presumed hazardous area would be measured horizontally the length of the extended hose (including dispenser handle), plus two feet, and vertically from grade to a height of 18 inches in all directions, unless the boundary of the hazardous location was proven to be different through engineering analysis.

Multiple sections of the National Electrical Code apply when motor fuel dispensers are installed in conjunction with motor fuel bulk storage.

The boundary of the classified area must be consistent with other codes and standards, including yet not limited to:

- National Institute of Standards and Technology (NIST) Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices as adopted by the 96th National Conference on Weights and Measures 2011
- NFPA 497, Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas
- NFPA 30, Flammable and Combustible Liquids Code

Use DLI's online tools to verify a license, certificate or registration

It's personal ... and business: DLI's improved online License Lookup tool now allows users to check the status of numerous personal and business licenses, certificates, registrations and bonds.

To see the full list of searchable items, visit www.dli.mn.gov/ccld/LicVerify.asp

License Lookup

On the move

For electrical work, moved buildings treated as new

Except for energy code compliance, buildings or structures that are moved into or within a jurisdiction are treated as new buildings (Minnesota Rules Chapter 1300.0220, subp. 4).

The existing wiring in a moved building is not automatically required to be removed and replaced with new wiring. If the existing wiring is in good condition and there is no evidence of disrepair or overloaded circuitry, the existing wiring may be acceptable.

However, one problem with older wiring is the temperature rating of the insulation on the conductors. New light fixtures are generally required to be connected to 90 degrees Celsius branch circuit supply wiring at lighting outlets while older branch circuit wiring most likely has a lower temperature rating of 75 or 60 C. The supply conductor insulation temperature rating requirements for new fixtures is often marked on the carton, in the installation instructions, and most certainly on the light fixture. The wiring at the lighting fixture outlet needs to be replaced with 90 C supply wiring if required by the fixture manufacturer.

A moved building must comply with the current National Electrical Code (NEC) to the extent practicable with respect to the following, including yet not limited to:

- Minimum 100 ampere service or larger if required
- Electrical service grounding and bonding
- Electrical service grounding electrode system
- Ground-fault-circuit-interrupter protection where required
- Arc-fault-circuit-interrupter protection where required.
- Minimum quantity and amperage of branch circuits (kitchen, bathrooms, laundry, etc.)
- Minimum quantity of receptacle outlets and lighting outlets in all locations indoors and outdoors
- Existing receptacle outlets that are not supplied with an equipment grounding conductor (two-prong receptacle outlets) need to be replaced with grounding type receptacle outlets that are grounded via an equipment grounding conductor (as an alternative, two-prong receptacle outlets can be replaced with GFCI receptacle outlets where permitted by the NEC; GFCI receptacles cannot be used as replacements for two prong receptacle outlets where equipment is specifically required to be grounded by the NEC)
- Tamper-resistant receptacles are required
- Smoke detectors and carbon monoxide detectors (according to the building code)

This is not an inclusive list; other requirements are also applicable depending on conditions in the field.

DLI strongly recommends all involved parties meet with the electrical inspector (and building inspector if applicable) at the beginning of the project so everyone has a clear understanding of what is required or allowed.

It is unlikely that a moved building would meet every code requirement, something that can be readily accomplished for a new building, such as exact spacing or location of receptacle outlets or other issues for which an electrical inspector can make a judgment call in the field. However, basic fire and life safety issues related to the electrical system are critical and must be in compliance.

Electrical inspection districts

City of Prior Lake is now a state-inspected electrical area

- Read the full electrical inspector change notice at www.dli.mn.gov/CCLD/PDF/ele_insp06012013.pdf.
- View the Electrical Inspector Directory homepage at www.dli.mn.gov/CCLD/ElectricalInspect.asp.
- Search for codes and inspectors with the Local Code Lookup at http://workplace.doli.state.mn.us/jurisdiction/.