ORDINANCE NO. 2176

AN ORDINANCE REGULATING ELECTRICAL WIRING ON DOCKING FACILITIES AND OTHER USES OF ELECTRTICITY ON/OR NEAR THE COUNCIL GROVE CITY LAKE IN THE COUNCIL GROVE LAKE PARK.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF COUNCIL GROVE, KANSAS:

Section 1. <u>PURPOSE</u>. This Ordinance is for the purpose of regulating electrical wiring and wiring methods on docking facilities and other uses of electricity on/or near the Council Grove City Lake because of the potential lethal electrical shock hazard to swimmers and boaters due to faulty electrical installations.

Section 2. ELECTRICAL WORK AND EQUIPMENT

- An Electrical Permit and inspection is required when any electrical wiring is being installed or modified on docks or near the lake.
- The electrical installation shall be in compliance with the latest version of the National Electrical Code (NEC) adopted by the City of Council Grove. Where differences occur between the provisions of this ordinance and the NEC, the most restrictive provision shall take precedence.
- 3. Electrical installations on docks and piers located at a single-family dwelling are not subject to the requirements of NEC Article 555, Marinas and Boatyards. However, all requirements in Chapters 1 through 4 of the NEC for outdoor, wet locations, including GFCI requirements, are applicable.
- 4. No electrical wiring other than dock electrical wiring and lighting systems operating at 30 volts or less is permitted within six (6) feet horizontally and three (3) feet vertically from the standard water level of the lake. Lighting systems operating at 30 volts or less shall comply with NEC Article 411.

5. Submersible pumps are prohibited.

Section 3. DOCK ELECTRICAL REQUIREMENTS.

- 1. 240 volt circuits shall be 4-wire (two phase conductors, one grounded conductor and one grounding conductor).
- 2. 120 volt circuits shall be 3-wire (one phase conductor, one grounded conductor and one grounding conductor).
- 3. Conductors shall be protected for overcurrent as specified in the NEC.
- Conductors shall be copper with insulation approved for the conditions of use and color coded as specified in the NEC.
- 5. Conductors shall be sized for the load served as specified in the NEC and connected to an overcurrent device that is appropriately sized for the maximum ampacity of the conductor(s) after the NEC derating has been calculated. In no case shall conductors be smaller than #12 AWG.
- Conduits, boxes and fittings approved for the condition of use, shall protect all conductors.
- 7. Conduit that is buried shall be listed for underground use.
- 8. Conduit shall be sized for the conductors as specified in the NEC.
- 9. Receptacles and lighting fixtures shall not be on same circuit.
- 10. All circuits shall be protected by ground-fault circuit-interrupters (GFCIs).
- A non-fused safety disconnect switch, designed to disconnect all ungrounded conductors supplying the docking facility, shall be located onshore and within six (6) feet of the docking facility ramp it serves.
- Non-dead-front safety disconnect switches are prohibited. The safety disconnect switch shall be a Hubbell HBLDS3, Square-D MD3304X, Leviton DS30-AX or equivalent.
- 13. The bottom of the safety disconnect switch shall be not less than 42 inches nor more than 48 inches above the dock walkway at the shore connection.

- 14. Conduit between the safety disconnect switch and the dock shall be sunlight resistant liquid tight flexible nonmetallic conduit (LFNC) or schedule 40 PVC with LFNC at all pivot points. LFNC must be protected from physical damage.
- 15. A grounding electrode at least eight (8) feet long and trade size of ½ inch shall be located onshore and within six (6) feet of the docking facility ramp it serves. If the docking facility utilizes a pier at the shoreline that consists of a steel frame welded to steel pilings driven into the lakebed, the steel frame may be used as the grounding electrode.
- 16. An insulated #10 AWG grounding electrode conductor shall be attached to the grounding electrode and then attached to an equipment grounding bus in the safety disconnect switch. A grounding bus and a grounded bus must be separated in the safety disconnect switch. Exception: If the grounding bus in the safety disconnect switch is too small to accommodate the insulated #10 AWG grounding electrode conductor, the grounded electrode may be bonded to the grounding conductors of the system at a location other than inside the safety disconnect switch.
- 17. All grounding conductors shall be electrically connected to the grounding bus in the safety disconnect switch
- 18. All grounding conductors shall be insulated, stranded, at least #12 AWG and have a continuous outer finish that is colored green.
- Grounding conductors shall be installed with the circuit conductors in all conduits.
- 20. All non-current carrying metal parts of the electrical system shall be bonded to the equipment grounding system with approved terminals.
- All receptacle outlets and switches shall be installed at least 36 inches above the finish dock surface.
- 22. All electrical equipment installed within eight (8) feet vertically from the dock finish surface or exposed to the weather shall be in weatherproof enclosures and suitable for wet locations.
- 23. All electrical equipment installed below roofed open areas, protected from the weather and installed above eight (8) feet vertically from the dock finish surface shall be suitable for use in damp locations.
- 24. All general use receptacle outlets shall be installed in weatherproof enclosures with "In Use Type" weatherproof attachment plug covers.
- 25. Electrical equipment such as receptacle outlets, switches, junction boxes, lighting fixtures, etc. shall not be installed within six (6) feet of any ladders attached to the docking facility.
- 26. Metallic enclosures installed in wet location areas, shall be installed with a minimum of ¼ inch air space between the enclosure and the supporting surface upon which they are mounted.
- 27. A #4 AWG bonding conductor shall be attached to the grounding electrode installed in paragraph 15 above with a separate clamp and then attached to the metal parts of the ramp leading to a floating structure with approved terminals, through-bolts and lock nuts.
- 28. A #4 AWG bonding jumper with a loop shall be installed around all pivot points in the ramp and attached with approved terminals, through-bolts and lock nuts.
- 29. All non-current carrying metal parts of the docking facility such as metal piping, metal equipment enclosures, metal frames of the structure and ramps, metal swim ladders and other metals in contact with the water or may become electrically energized shall be electrically bonded to the grounding electrode.

Section 4. <u>COMPLIANCE DATE</u>. All existing docks, containing electrical wiring, shall be in compliance with this ordinance within 180 days of the effective date of this ordinance.

Section 5. <u>VIOLATIONS AND PENALTIES</u>. Any person violating any provision of this article shall be deemed guilty of a code violation and, upon conviction thereof, shall be

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punishable by a fine not to exceed \$100.00. Each separate day or any portion thereof, during which any violation of this article occurs or continues, shall be deemed to constitute a separate offense and, upon conviction thereof, shall be punishable as herein provided.

Section 6. <u>INSPECTION PRIOR TO TRANSFER</u>. Prior to the city approving a transfer of a cabin site at the Council Grove Lake Park, the City Inspector shall conduct an inspection of any electrical wiring on the cabin site dock. Any dock electrical wiring corrections must be completed and then approved by the City Inspector before a lake lot lease transfer can be placed on the agenda for a City Council meeting.

Section 7. REPEAL. This ordinance repeals all ordinances in conflict herewith.

Section 8. <u>EFFECTIVE DATE</u>. This ordinance shall be effective upon its publication in the official city newspaper.

PASSED AND APPROVED by the governing body of the City of Council Grove, Kansas on this $5^{\frac{1}{12}}$ day of $A_{\rho_{11}}$, 2016.

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Steven Shepard, Mayor

ATTEST: Danny Matthews

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City Clerk (SEAL)

