



# ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

Ron Fuller, Chief Electrical Inspector

Vol. 11 No. 9

September 2008

## ● Public Hearings Scheduled For Rule Revisions

Public hearings for the 2008 electrical rule revisions (chapter 296-46B WAC) have been scheduled. The hearings are:

**Tukwila – September 23, 2008**, 10 a.m., Labor and Industries Tukwila Service Location, 12806 Gateway Drive.

**Spokane – September 25, 2008**, 2 p.m., Labor and Industries Spokane Service Location, 901 N. Monroe Street, Suite 100.

**Tumwater – September 29, 2008**, 9 a.m., Department of Labor and Industries Building, 7273 Linderson Way SW, Room S117.

The current proposed rule can be viewed at:

<http://www.lni.wa.gov/TradesLicensing/Electrical/LawRulePol/RuleDev/default.asp>

If you cannot attend a hearing, you can make written comments (must be received by L&I before 5:00 p.m., September 29, 2008) to: Chief Electrical Inspector, Department of Labor and Industries by:

- Mail to: PO Box 44460, Olympia WA 98504-4460
- Fax to: 360-902-5595; or
- E-mail to: ElectricalProgram@LNI.WA.GOV

## ● Changes Coming in the 2008 NEC and WAC

Beginning this month, we will publish monthly articles on important NEC and rule changes that will be effective when the WAC is effective on December 31st.

### ● New in the 2008 NEC – Receptacle and Cover Requirements

Beginning December 31<sup>st</sup>, the NEC is requiring two significant changes for receptacles and their covers. There will be no extension or delayed implementation for either of these new requirements. If you have existing stock, it must not be used in the locations where the new requirements apply. There will be no extension or delay of implementation for either of these requirements.

**First** – NEC 406.8(A) and (B) will require all 125 volt, 15- and 20-ampere nonlocking receptacles, installed in either a damp or wet location, to be a listed weather resistant type receptacle. There is no exception for this requirement including installing a weather resistant cover.

**Second** – NEC 406.11 will require listed tamper-resistant receptacles in all areas specified in NEC 210.52 (i.e. dwelling unit receptacles) for all 125 volt, 15- and 20-ampere receptacles.

### ● Plug-in Household Appliances

Legislation that passed in 2002 modified the definition of “equipment” in RCW 19.28.100. The 2002 legislation changed the requirements for wiring plug-in appliances. This article supersedes an article about the wiring of appliances in the October 2001, *Electrical Currents* newsletter.

RCW 19.28.010 requires “*All wires and equipment and installations thereof...*” within the scope of the statute to conform to the licensing, permitting, inspection, and installation standards within the statute. RCW 19.28.006(9) says, “*“Equipment” means any equipment or apparatus that directly uses, conducts, insulates, or is operated by electricity but does not mean: Plug-in appliances; or plug-in equipment as determined by the department by rule.*” (bold added for emphasis)

RCW 19.28.006(9) exempts plug-in appliances from all the requirements of chapter 19.28 RCW (e.g. licensing, certification, permitting, inspection, etc.). For this exemption, appliances are limited, by the definition in WAC 296-46B-100(7), to household appliances. For any other appliance, all the requirements of chapter 19.28 RCW apply (e.g. licensing, certification, permitting, inspection, etc.).

### Safety Tip of the Month!

*Driving in the rain* – Prevent skids by driving slowly and carefully, especially on curves. Steer and brake with a light touch. When you need to stop or slow, do not brake hard or lock the wheels and risk a skid. Maintain mild pressure on the brake pedal.

A defensive driver adjusts his or her speed to the wet road conditions in time to avoid having to use any of these measures!

WAC 296-46B-925(10) allows the installation of plug and cord equipment where “...the plug and cord are a single listed unit consisting of a molded plug and cord and not exceeding 250 volt 60 ampere single phase. The plug and cord can be field installed per the manufacturer’s instructions and the product listing requirements. The utilization equipment must be a single manufactured unit that does not require any electrical field assembly except for the installation of the plug and cord.”

This exemption is specific to the first time, new, installation of the equipment and does not include replacing, repairing, servicing, or maintaining the plug and cord equipment or any exception from permitting and inspection requirements. Any company or individual that is replacing, repairing, servicing, or maintaining the plug and cord equipment must meet the requirements for contractor licensing, electrician certification, permitting, and inspection. This means that an appropriate contractor license and electrician certification along with appropriate permitting and inspection is necessary when replacing, repairing, servicing, or maintaining the plug and cord equipment.

Stakeholders have made WAC revision proposals to add “service, maintenance, and repair” to the WAC 296-46B-925(10) exemption. The Technical Advisory Committee, Electrical Board, and L&I have declined to accept the proposal to expand the exemption. Service, maintenance, and repair were intentionally excluded from the WAC exemption because of the increased safety risk to the electrical worker and customer once an electrical system has been energized.

However, RCW 19.28 does not regulate (e.g. licensing, certification, permits, etc.) repair work done in an appliance repair shop. In this business environment appropriate supervision, quality control, and safety is the exclusive responsibility of the shop owner. Field work is limited to plugging the cord into an existing electrical receptacle. Electrician certification or contractor licensing is not required to unload a household appliance from a truck and plug it in to a compatible existing electrical receptacle.

### ● Temporary Plug and Cord Wiring – Carnivals, Fairs, Concerts, Trade Shows and Similar Events

Wiring a temporary power distribution system, using plug and cord wiring methods, is not exempt work even if the power source is from a permanently installed electrical receptacle. A permit and inspection is required for any type of temporary power distribution system that uses generators, dimmers, transformers, feeders, branch circuits, or other means that distribute power to electrical equipment (e.g. amplifiers, lights, etc.). A distribution system means the interconnecting wiring, spider boxes, or other equipment that is installed to distribute power to the end user (e.g. booth operator, vender, etc.) for plugging in their equipment.

If the plug and cord system and equipment are owned by the installer (e.g. show operator, road crew, etc.), the installer is considered to be an owner and is exempted from the requirements for electrical contractor licensing and certification by RCW 19.28.261(1) so long as: the installer has approval from the property owner to make the electrical installation and there is no hard wiring involved in the system. When these conditions are met, the plug and cord electrical distribution system is the “place of business” for the system/equipment owner or firm.

### ● Labor And Industries Electrical Work Permits And Inspection Fees

An inaccurate description of electrical work performed on an electrical permit obtained online or in person can cause delays in your electrical project. A valid electrical permit must include a detailed description of the work performed and inspection fees paid. Training materials and fee calculation worksheets have been posted and available on our Web site for the last eight years. You can find these documents at:

<http://www.lni.wa.gov/TradesLicensing/Electrical/FeePermlnsp/PermitInspect/Fees.asp>

### ● Electrical Question of the Month

**This Month’s Question:** The maximum overcurrent protective device that can be used to protect conductors enclosed in 1/2" liquid tight flexible metal conduit, while still permitting the flex to be used as the equipment grounding conductor is \_\_\_\_\_ amperes or less. **A) 20, B) 30, C) 60, D) 80.**

**Last Month’s Question:** The Department of Labor and Industries with electrical industry stakeholder input may change the duties of the electrical administrator by following the formal WAC development process in the Administrative Procedure Act (Chapter 34.05 RCW). False, only the legislature can change the RCW. The department has the responsibility to create rules (with stakeholder and Technical Advisory Committee input), but the rules can not require anything that is not authorized in the statute.