



# ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

Ron Fuller, Chief Electrical Inspector

Vol. 10 No. 7

July 2007

## ● L&I To Do Electrical Inspections For The Suquamish Tribe

An agreement has been reached for the L&I Electrical Program to do electrical inspections and enforce Washington's licensing laws for the Suquamish Tribe. The agreement includes all electrical contractors and individual owners doing electrical work on the Port Madison Indian Reservation. Effective immediately, anyone doing electrical work on the Suquamish reservation should buy an L&I electrical permit for any electrical work they are beginning. Permits must be obtained prior to beginning your electrical work. Electrical contractors should follow all Washington laws for electrical licensing, supervision of electrical trainees, etc. L&I is committed to providing the best possible electrical inspection service to the Suquamish Tribe.

You can buy your electrical permit at the Bremerton L&I office or on-line at:

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

## ● Upcoming Stakeholders Meetings

Upcoming stakeholder meetings will run from September 2007, through June 2008, throughout the state. Other upcoming meeting locations and times will be published in future *Electrical Currents* articles. Attending your local stakeholder meeting will help you stay informed and provide your input about the electrical industry in Washington and your local area.

### September Electrical Stakeholders Meetings

September 24, 2007	PUD No.1 of Douglas County East Wenatchee Headquarters Office 1151 Valley Mall Parkway East Wenatchee, WA	6PM - 9PM
September 25, 2007	Spokane Community College, Lair Bldg. Sasquatch Room, Spokane. <b>Parking passes are required.</b> Pick up a parking pass at either the Spokane service location or print one from the following web page: <a href="http://www.lni.wa.gov/tradeslicensing/electrical/whatsnew/calendar/default.asp">http://www.lni.wa.gov/tradeslicensing/electrical/whatsnew/calendar/default.asp</a>	6PM - 9PM
September 26, 2007	City of Pullman, 325 SE Paradise St., Pullman	6PM - 9PM

## ● Where Are "Hospital Grade" Receptacles Required?

To adequately protect patients, health care facilities have very specific standards of installation that are often substantially different from a typical electrical installation. National Electrical Code (NEC) 517, Health Care Facilities, has special requirements for "patient care" areas (e.g. redundant grounding/bonding, insulated copper equipment grounding conductors in metal raceways, hospital grade MC or AC cables, receptacle requirements, etc.).

NEC 517.2 defines a "patient bed location" as a general or critical care inpatient sleeping bed or the bed/procedure table used in a critical care area. NEC 517.2 also defines "critical care area" as an area where a patient is subjected to an invasive procedure and connected to a line-operated electromedical device. The definition describes: operating rooms, delivery rooms, etc. Although not included in the NEC examples, dental chairs and other locations where an invasive procedure is performed and the patient is connected to a line-operated electromedical device are considered to be "critical care."

NEC 517.18(B) requires that listed "hospital grade receptacles" be used in general care area patient bed locations, and NEC 517.19(B) requires that "hospital grade receptacles" be used in critical care patient bed locations. Critical care locations must be identified by the facility operator. On plan reviewed jobs, these will be identified on the approved plans. On jobs not requiring plan review, the inspector will ask the facility operator if the facility has any critical care procedure tables or patient bed locations.

Installers should also be aware the medical equipment manufacturers may also have specific requirements. Examination tables and dental chairs, for example, often have a manufacturer requirement that a "hospital grade" receptacle supply power to the table or chair.

If you are working in a NEC 517, health care facility, you should review previous *Electrical Currents* articles written in July 1998, November 1998, May 1999, January 2005, and August 2005. These articles are available online:

<http://www.lni.wa.gov/TradesLicensing/Electrical/WhatsNew/Currents/default.asp>

● **Improperly Filled Out Class B Permits Will Result In A Citation**

Contractors have recognized the advantages of using Class B inspection labels. There were about 37,000 Class B labels used this past year. The Class B process has saved contractors, their customers, and electrical inspector’s time and money.

Class B work is restricted to electrical work that requires minimal modification to the electrical circuit and has limited exposure to electrical hazards. The use of the Class B label is restricted to electrical contractors and approved businesses that have full-time certified electricians on staff.

Class B labels must be applied prior to beginning the electrical work and returned to L&I within fifteen days after posting the jobsite portion of the label. We have had problems with the way some contractors and electricians have filled out the required information on the labels. Both the contractor and the installer have responsibility to ensure the required information is accurate and complete.

Both portions of the label should be filled out at the same time prior to beginning the work. The information on each label should match. **The following information must be complete and accurate:**

- **Date of Work**
- **Electrical Contractor’s Name**
- **Electrical Contractor’s License #** – The contractor’s license number, not the administrator’s.
- **Electrician Certificate #** – The electrician’s certificate of competency number, not the administrator’s certificate number.
- **Site Address** – The actual street address of the jobsite where the Class B label is posted.
- **City, County, In City Limits Y/N, Power Company** – Do not leave any of this information blank.
- **Jobsite owner’s name and phone #** – This information is necessary for L&I to arrange the possible inspection. The phone number should be a daytime number for the person whom we will contact to arrange access for the inspection.
- **Description of work** – The description given by the electrician must clearly identify that the work is eligible for the Class B random inspection process. The description must be specific enough to allow the inspector to identify and find the work that was done. The following are actual examples of ineligible, incomplete, or ambiguous descriptions that we have received:

<b>Ineligible Work</b>	<b>Incomplete/Ambiguous Description</b>
New furnace	Ceiling fan
Dedicated 20A circuit	Push-Pull
Whole home HVAC install	HP
New circuit to swimming pool heater	Hang light fixture
Etc.	Etc.

An example of an acceptable “description of work”: “Extend ckt. #4, two outlets, N. wall dining room.”

Your failure to properly post, fill out, and return the Class B labels will result in voiding the label, will require additional inspections of your Class B installations and cost you inspection money. You may also receive a citation for improper use of the label. Please familiarize yourself with all the Class B opportunities and responsibilities by studying WAC 296-46B-900 (20) through (26).

● **Question of the Month**

**This month’s question:** A Class B label can be used for replacing a 240v, 110A furnace. True/False

**May question was:** The grounded conductor of a 12VDC circuit in a photovoltaic output circuit can be what color? **A)** Black, **B)** White, **C)** Green, **D)** No Requirement. The correct answer is **B** (NEC 200.6)