BC Hydro Representatives

- Raymond Irving – Field Manager, 250-755-4798
- Terry Giesbrecht – Pole Maintenance Coordinator, 604-302-5511
- Spencer Nicholson – Pole Maintenance Coordinator, 604-250-9430
- Rene Roddick – Vegetation/Pest Biologist, 604-543-1533
BC Hydro Test & Treat Program operates on an 8 year cycle. Approximately 105,000 distribution poles and 11,000 – 13,000 transmission poles are treated every year.
Why Do We Treat Poles?

- **Safety** → public and property safety, and crew safety while working on poles
- **Reliability** → continuous uninterrupted service to our customers
- **Environmental** → use of preservatives reduces number of trees to be harvested, minimizes impact of disposal/recycling of used poles, and minimizes ground disturbance
- **Financial Responsibility** → cost effectiveness of maintenance versus pole renewals
Pole failures

Pole rotted off at groundline

Public Safety Hazard
Work Plan – Bowen Island

- Program will begin October 15 – 30, 2015
- Approximately 1,517 poles
- Up to 5 crews of certified applicators
Work Plan (cont’d)

- Vehicle Id with BC Hydro contractor sign
- Applicator checks for wells and water at each site – maps, physical search, looks for flags and pins placed by residents
- Pre-job with contractor prior to commencement of work
Pest Management Plan (PMP)

- Wood preservatives ➔ approved and registered for utility wood poles by Health Canada
- Contractors ➔ certified and licensed by the BC Ministry of Environment (MoE)
PMP (cont’d)

- Work → under Pest Management Plan for Wood Structure Maintenance by the BC Hydro and Power Authority

- Work → strict adherence to *Integrated Pest Management Act and Regulations*
Pole Inspection Process

- Inspectors assess poles above ground for safety and equipment condition:
  - Damage from insects, woodpeckers, vehicles
  - Visible signs of rot
  - Equipment failure/damage
  - Sound, probe and drill to assess for insect/rot/damage
Pole Inspection (cont’d)

- Inspectors assess poles below ground:
  - Look for shell rot
  - Probe and drill to assess pole condition and strength → insect/fungus damage
Drilling Poles
Fumigant placed into drill holes using hand-operated sprayer
Boron Rods
Installing Plugs
Field-Made Pole Bandage
Installing a full bandage
Clean-up
Wood Preservatives

- Metam sodium fumigant:
  - liquid preservative placed in drill holes in pole and capped (preservative contained in pole)
  - mixes with moisture inside poles and evaporates into pole within 7 hours
  - Other uses: commonly added to soil for planting preparation in agriculture.
Wood Preservatives (cont’d)

- Copper hydroxide borate bandage:
  - wrapped and stapled around pole below ground
  - bandage covered in water-repellent material
  - preservatives bind strongly to the wood pole
Wood Preservatives (cont’d)

- Boron/copper rods:
  - solid rods are placed in drill holes and capped to contain preservative in pole
  - preservative released slowly into pole over a period of 10 years
  - Other uses: natural sources of boron are commonly found in soil. Used in eye wash and soaps.
Human Health Protection

- Field crews check multiple information sources prior to treatment to ensure human health and water are protected:
  - GIS mapping reviewed for locations of registered wells, watersheds, and waterbodies
  - Check for flags and pins placed by residents
  - Sensitive ecosystems and waterbody mapping (from Islands Trust) reviewed for additional information
Human Health Protection

- Information sources reviewed by field crew (cont’d):
  - Field assessment completed prior to treatment on a site-by-site basis (10 meter physical sweep around pole)
Health Protection (cont’d)

- Contractor certification ensures experienced, knowledgeable, and skilled applicators
- Contract specifications and details reviewed with contractor at pre-job conference
- Biologist/Specialists and Pole Maintenance Coordinator inspect, monitor and provide overall quality control
GIS Mapping System
Well Data
### No-Treatment Zones

<table>
<thead>
<tr>
<th>Product</th>
<th>Fish bearing body of water</th>
<th>Non fish bearing body of water – wet</th>
<th>Non fish bearing stream – dry</th>
<th>Water well</th>
<th>Point of diversion from water intakes (from any side where land slopes upward)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid internal preservative</td>
<td>3 metres</td>
<td>1 metre</td>
<td>0 metres (do not treat below high water mark)¹</td>
<td>10 metres</td>
<td>10 metres upslope</td>
</tr>
<tr>
<td>External liquid preservative (brush on)</td>
<td>3 metres</td>
<td>1 metre</td>
<td>1 metre</td>
<td>10 metres</td>
<td>10 metres upslope</td>
</tr>
<tr>
<td>Groundline bandages</td>
<td>3 metres</td>
<td>1 metre</td>
<td>1 metre</td>
<td>10 metres</td>
<td>10 metres upslope</td>
</tr>
<tr>
<td>Boron rods²</td>
<td>1 metre</td>
<td>0 metres ³</td>
<td>0 metres ³</td>
<td>10 metres</td>
<td>5 metres upslope</td>
</tr>
</tbody>
</table>

¹ Notes:
- Liquid internal preservatives will only be applied to the portion of the pole that is permanently above the waterline.
- The use of boron rods does not have a regulated NTZ requirement because boron is an /PMR Schedule 2 excluded product, however, BC Hydro has exceeded regulations and committed to NTZs around fish-bearing waterbodies and water consumption sources (wells and intakes).
- Solid internal preservatives can be used in locations that may be below the water table for portions of the year, provided they are not fish-bearing and dry at time of treatment.

² This table was modified from the NTZ table in the PMP to list boron.

³ This table was modified from the NTZ table in the PMP to list boron.
Summary

- Regulated pesticide program
- PMP reviewed by MoE (posted on www.bchydro.com)
- Pole maintenance important for public and worker safety
- Certified applicators completing work
Crews search for well/waterbody/watershed on maps and in field

Pre-job conference prior to work

Quality assurance by BC Hydro Pole Maintenance Coordinator and Specialist/Biologists

For more information, call BC Hydro representative