Treasted Timber
Product Knowledge
Topics for Discussion

• Why we treat
• Timber applications and the Hazard Class system
• Treatment results
• Preservatives
• The vacuum/pressure process
"Vw xf x u d d # q w h j u l w | "

z k d w v # k d w # d j d B
“So what happens if it keeps rotting?”
"Wkdv'v#lj kw/#w#do#v#gr z qs"
• To increase the service life of non-durable timber species and make them more resistant to attack by its natural enemies i.e., protection from decay fungi and wood boring insects.
• And increase the applications for which timber can be used.
Hazard Class System

• Cornerstone of preservation industry
• All timber going through a treatment plant is aimed at meeting a particular Hazard Class
Hazard Class 1

- Above ground
- Protected from moisture
- Borer
- Not termites
- House framing
- Flooring
- Furniture
- Joinery
Hazard Class 2

- Above ground
- Protected from moisture
- Borer
- Termites
- House framing
- Flooring
- Furniture
- Joinery
Hazard Class 3

- Above ground
- Exposed to weather
- Weatherboards
- Pergolas
- Decking
Hazard Class 4

- In ground
- Fence posts
- Pergolas (in ground)
- Landscaping
- Vineyard posts
Hazard Class 5

- In ground
- Critical use
- Retaining walls
- Piling
- Poles
Hazard Class 6

- Seawater Immersion
- Marine piles
- Jetty cross-bracing
- Landing steps
Hazard classes relate directly to end-use application

- Chosen to suit biological hazard
  - ie Protection from borers only or borers and fungi

- Chosen to suit exposure conditions
  - ie Internal, external, above ground, in-ground, marine
Treatment Results

- Penetration
- Retention
Preservatives

Three main types:

- **Waterborne** – Chemicals that mix with water.
  - CCA, TTQ, Boron, Permashield & Blockade

- **Light Organic Solvent Preservatives (LOSP)** – Chemicals that are mixed with a solvent such as white spirits
  - H2 (Permethrin), H3 (Permethrin and TBTN or Azoles)

- **Oilborne**
  - Creosote, PEC.
• Long documented history
• In a changing environment, it is rare to find a product or technology that has remained more or less unchanged for more than 70 years
• Recent History
  • US - Industry decision to move to alternatives Jan 2004
  • Canada - followed US lead
  • Europe - EU “Mktg & Use Directive” banned CCA commencing July 2004
Recent History
- Japan - Phase out of CCA commenced early to mid 1990’s
- NZ – No restrictions
- Aust - March 06, APVMA review restricted applications in 4 areas
  - Playground equipment
  - BBQ Tables
  - Hand Rails
  - Domestic decking

Changing!
CCA-alternative offering similar level of protection
• Water-based
• Combination of Copper + DDAC
• H1 - H5
• 50 year limited guarantee
• Used in Australia for 12 year
• Specified by National Parks & Local Councils etc
Vacuum Pressure Impregnation

- Initial Vacuum
- Flood
- Pressure Rise
- Pressure Release
- Blow/Pump Back
- Final Vacuum
- Final Blow/Pump Back
THE GUIDE TO WORKING SAFELY WITH TREATED TIMBER

WEAR
• Gloves
• Goggles
• Mask

DON'T
• Burn it
• Cook with it
• Use it for animal litter

DO
• Wash work clothes separately
• Dispose of waste in an approved landfill

Always wear dust mask and goggles.
Always wear gloves when working with treated wood.
Wash work clothes separately.
Dispose of waste in an approved landfill.
Do not burn treated wood.
Do not use treated wood in contact with drinking water.
Treated wood should not come into contact with soil or animal litter.

TimTech
CHEMICALS
Thank You