Improved Wood Preservation Practices for Railroad Bridge Timbers

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Railroad Bridge Timber Study Goals

- Any alternative material tie products available
- Best species of wood to use
  - strength
  - durability
  - acceptance of preservative treatment
- Best types of wood treatment
  - best penetration = longest life span
  - least environmental impacts
  - cost of treated timbers
  - availability of treated timbers
  - ease of disposal including lowest cost
- What are other railroads and States using for timbers on their Railroad bridges
- Update Bridge Timber Best Management Practices
Results of Timber Study

- Wood is still the best railroad bridge tie material
- Best wood species to use
  - Southern yellow pine
  - Douglas fir
  - Oak
- Best preservative treatments
  - Copper naphthenate
  - Creosote
    - no leaner that 75-25 creosote/petroleum solution
    - no more than 8 lbs retention – empty cell
- Updated Best Management Practices
Going Forward

• Department will still purchase wood timbers
  • Southern Yellow Pine – preferred product
  • Douglas Fir
  • Oak

• Preservative treatment depending on use location
  • Copper Naphthenate – environmentally sensitive areas
  • Creosote – other areas

• Best Management Practices updated
  • implement more material controls both at the manufacturer and upon material delivery