#### MAINTENANCE PLANNING GUIDELINES

2006

**ACTIVITY:** Patching Roads (R311)

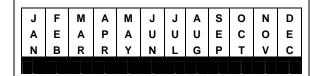
**MAJOR & MINOR** 

**ACTION:** Pothole Patching (Temporary/Emergency Repairs)

**DEFINITION**: The time and expenses incurred for repairing potholes by hand or machine the temporary patching of blow-ups.

**PURPOSE:** To temporarily restore rideability through the hand repair of roadway or bridge surfaces using asphaltic mixtures until permanent repairs can be made.

**SCHEDULING:** Potholes should be patched as soon as priorities allow. Major Routes will take priority over Minor Routes. Severity of potholes will determine priority for the safety of motorist. Reference the Incident Response Plan for Priorities.



### **RECOMMENDED EQUIPMENT:**

- Dump Trucks or Thermolay Truck or Injection Patcher
- Compaction device; Hand Tamper, Vibratory Compactor or Small Power Roller
- Asphalt Distributor
- Traffic Control Equipment; (See EPG 616.23 Traffic Control for Field Operations)

#### **RECOMMENDED MATERIAL:**

- Liquid Asphalt
- Pre Mix
- Hot Mix
- High Type Mix (UPM etc.)

#### **RECOMMENDED PROCEDURE:**

- 1. Place traffic control devices as required.
- 2. Remove loose material and square-up hole, if practical.
- 3. Tack lightly with liquid asphalt.
- 4. Fill hole with material and compact in 2-in. layers.
- 5. Level patch with rake to ½-in. above surface.
- 6. Compact patch as necessary.
- 7. Clean up work zone.
- 8. Remove traffic control devices.
- 9. Permanent repairs will occur when weather is appropriate and material becomes available.

**SAFETY:** Clean up and remove excess material. Wear all appropriate PPE. Refer to Safety Policies, Rules & Regulations – Employee Handbook

**OTHER CONSIDERATIONS:** Cinder sealing of patches will increase the durability of the patch.

**REFERENCES:** Missouri Standard Specifications for Highway Construction Section 401

# **R311 – Patching Roads (Pothole Patching)**



(1) Pothole Patching



(2) Pothole Patching



(3) Pothole Patching



(4) Priming a Patch Area



(5) Applying Cold Patch



(6) Finished Product



(7) Injection Patcher Set Up



(8) Injection Patcher Application



(9) Injection Patcher Application



(10) Pothole



(11) Priming Pothole



(12) Filling Pothole with Cold Mix Asphalt

## Missouri Department of Transportation Maintenance Activity Planning Guidelines



(13) Leveling Pothole Patch



(14) Hand Rolling Pothole Patch



(15) Sealing Pothole Patch