41-3.01C(2) Public Safety and Application Plans

Before starting crack treatment, submit a public safety plan and an application plan for applying HMWM as shop drawings.

The public safety and application plans must identify the materials, equipment, and methods to be used.

In the public safety plan, include the SDS for each component of HMWM and details for:

- 1. Shipping
- Storage
 Handling
- 4. Disposal of residual HMWM and containers

If the project is in an urban area adjacent to a school or residence, the public safety plan must also include an airborne emissions monitoring plan prepared by a CIH certified in comprehensive practice by the American Board of Industrial Hygiene. Submit a copy of the CIH's certification. The CIH must monitor the emissions at a minimum of 4 points including the mixing point, the application point, and the point of nearest public contact. At work completion, submit a report by the CIH with results of the airborne emissions monitoring plan.

The application plan must include:

- 1. Crack treatment and coefficient of friction testing schedules
- Methods and materials including:
 - 2.1. Description of equipment for applying HMWM
 - 2.2. Description of equipment for applying sand
 - 2.3. Gel time range and final cure time for resin

41-3.01D(3) Department Acceptance

The Engineer accepts a treated area if:

- 1. Corresponding test tiles are dry to the touch
- 2. Treated surface is tack-free and not oily
- 3. Sand cover adheres enough to resist hand brushing
- 4. Excess sand is removed
- 5. Coefficient of friction is at least 0.30 when tested under California Test 342

41-3.03 CONSTRUCTION

Before applying HMWM, clean the pavement surface by abrasive blasting and blow loose material from visible cracks with high-pressure air. Remove concrete curing seals from the pavement to be treated. The pavement must be dry when blast cleaning is performed. If the pavement surface becomes contaminated before applying the HMWM, clean the pavement surface by abrasive blasting.

Protect existing facilities from HMWM. During pavement treatment, protect pavement joints, working cracks, and surfaces not being treated. Repair or replace existing facilities contaminated with HMWM at your expense.

The equipment applying HMWM must combine the components by either static in-line mixers or by external intersecting spray fans. The pump pressure at the spray bars must not cause atomization. Do not use compressed air to produce the spray. Use a shroud to enclose the spray bar apparatus.

You may apply HMWM manually to prevent overspray onto adjacent traffic. If applying resin manually, limit the batch quantity of HMWM to 5 gallons.

Apply HMWM at a rate of 90 sq ft/gal. The prepared area must be dry and the surface temperature must be from 50 to 100 degrees F while applying HMWM. Do not apply HMWM if the ambient relative humidity is more than 90 percent.

Flood the treatment area with HMWM to penetrate the pavement and cracks. Apply HMWM within 5 minutes after complete mixing. Mixed HMWM viscosity must not increase. Redistribute excess material with squeegees or brooms within 10 minutes of application. Remove excess material from tined grooves.

Wait at least 20 minutes after applying HMWM before applying sand. Apply sand at a rate of approximately 2 pounds per square yard or until refusal. Remove excess sand by vacuuming or sweeping.

Do not allow traffic on the treated surface until:

- 1. Treated surface is tack-free and not oily
- 2. Sand cover adheres enough to resist hand brushing
- 3. Excess sand is removed
- 4. Coefficient of friction is at least 0.30 determined under California Test 342

41-9.01D(6)(a) General

The final surface texture of the individual slab replacement must pass visual inspection—and have a coefficient of friction of at least 0.30 determined under California Test 342.

Allow at least 25 days for the Department to schedule for coefficient of friction testing. Notify the Engineer when the pavement is scheduled to be opened to traffic.

41-9.03H Noncompliant Individual Slab Replacement

Replace an individual slab replacement slab that has any of the following defects:

- 1. One or more full-depth cracks.
- 2. Concrete raveling.
- Noncompliant smoothness except you may request authorization for grinding under section 40 and retesting. Grinding that causes a depression will not be authorized. Smoothness must be corrected within 48 hours of placing RSC.
- 4. Noncompliant modulus of rupture.

If the modulus of rupture at opening age is at least 400 psi and the modulus of rupture at 3 days is at least 500 psi but less than 600 psi, you may request authorization to leave the RSC in place and accept the specified deduction.

If pavement is noncompliant for coefficient of friction, groove or grind the pavement under section 42. Comply with section 40-1.03N and groove or grind before the installation of any required joint seal or edge drains adjacent to the areas to the noncompliant area.