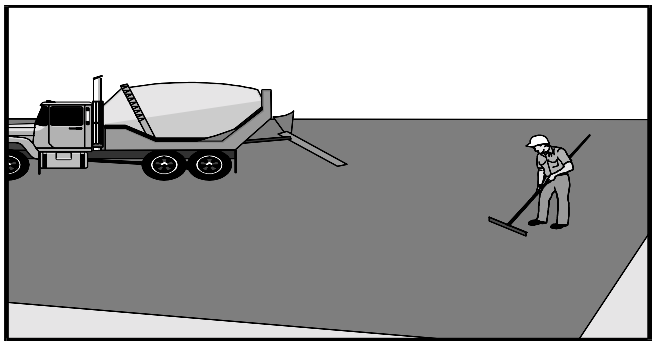
ACTIVITY: Paving Operations

CP – 03



Targeted Constituents				
● Significant Benefit		◗ Partial Benefit		○ Low or Unknown Benefit
◗ Sediment	○ Heavy Metals	○ Floatable Materials	○ Oxygen Demanding Substances	
○ Nutrients	◗ Toxic Materials	◗ Oil & Grease	○ Bacteria & Viruses	○ Construction Wastes

Implementation Requirements				
● High		◗ Medium		○ Low
○ Capital Costs	○ O & M Costs	◗ Maintenance	○ Suitability for Slopes >5%	◗ Training

Description

Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution, properly disposing of wastes, and training of employees and subcontractors. This management practice is likely to create partial reductions in sediment, toxic materials, and oil and grease.

Approach

- Avoid paving during wet weather.
- Store materials away from water courses to prevent stormwater run-on (see CP-5: Material Delivery, Storage, and Use).
- Protect water courses, particularly in areas with a grade, by employing BMPs to divert runoff or trap/filter sediment (see TCP-17, 18, 22, 24, 25).
- Leaks and spills from paving equipment can contain toxic levels of heavy metals and oil and grease. Place drip pans or absorbent materials under paving equipment when not in use. Clean up spills with absorbent materials rather than burying. See CP-13: Vehicle and Equipment Fueling and CP-06: Spill Prevention and Control in this section.
- Cover catch basins and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- There are several commercially available covers that magnetically seal flat catch basins and inlets. Shovel or vacuum saw-cut slurry and remove from site. Cover or barricade storm drains during saw cutting to contain slurry.
- If paving involves portland cement concrete, see CP-10: Concrete Waste Management in this section.

- If paving involves asphaltic concrete, follow these steps:
  - Do not allow sand or gravel placed over new asphalt to wash into storm drains, streets, or creeks by sweeping. Properly dispose of this waste by referring to CP-07: Solid Waste Management in this section.
  - Old asphalt must be disposed of properly. Collect and remove all broken asphalt from the site and recycle whenever possible.
  - If paving involves on-site mixing plant, follow the stormwater permitting requirements for industrial activities.

- Train employees and subcontractors about the importance of these practices.

Requirements

- Costs (Capital, O&M)
  - All of the above are low cost measures.

Maintenance

- Inspect and maintain machinery regularly to minimize leaks and drips.

- Maintain inlet protection so that water is not allowed to back up onto areas subject to traffic. If water begins to backup and flood areas subject to traffic, the protective device must be removed and alternative measures deployed.

- Clean inlet protection measures when sediment reaches the sediment storage capacity. Repair inlet protection measures as needed.

- Inspect employees and subcontractors to ensure that measures are being followed.

- Keep ample supplies of drip pans or absorbent materials on-site.

Limitations

There are no major limitations to this best management practice.

Primary References

California Storm Water Best Management Practice Handbooks, Construction and Industrial Handbooks, CDM et.al. for the California SWQTF, 1993.

Caltrans Storm Water Quality Handbooks, CDM et.al. for the California Department of Transportation, 1997.

Subordinate References

Blueprint for a Clean Bay-Construction-Related Industries: Best Management Practices for Storm Water Pollution Prevention; Santa Clara Valley Nonpoint Source Pollution Control Program, 1992.

Hot-mix Asphalt Paving Handbook, U.S. Army Corps of Engineers, AC 150/5370-14, Appendix I, July 1991.