

O&M Staff Training Module 5: Maintenance Best Practices for Water Quality Protection Street Operations



City of Tacoma Environmental Services
2018

**How do you select the
right BMP for the job?**

Many of your work activities require BMPs

- Road repair and resurfacing
- Pavement striping
- Snow and ice control
- Pavement flushing/street cleaning

Basic BMPs to use on every activity:

Suggested BMP Strategies	Recommended BMPs
Keep Water Away from Area	Schedule work for dry weather. Cover stockpiles. Berm around work area with sandbags, etc.
Good Housekeeping	Sweep area when job is complete.
Spill Prevention	Keep Spill Kit on site and clean up spills immediately
Seasonal Limitations	Oct.1-Apr.30 – No soil exposed more than 2 days May 1-Sept.30 – No soil exposed more than 7 days

When repairing or resurfacing a road:

Key steps to remember

1. Install BMPs to protect nearby catch basins/storm drain inlets and adjacent watercourses before starting work.
 - CB sock
 - Inlet Cover Mat
 - Coir Logs
2. Spray exposed dirt or base material to keep dust down.
3. Cover stockpile materials and berm around them to prevent contact with stormwater.



Note: Clean trucks, equipment, tools in designated equipment washing facility where wash water will not drain to storm system.



When repairing or resurfacing a road:

Key steps to remember

1. Catch drips from paving equipment (when not in use) with absorbent material or pads.
2. Install pavement. Apply emulsified tack coats carefully, avoiding overspray and contact with stormwater.
3. Sweep up excess materials and dispose of properly. May need to call Sweeper truck.
4. Remove storm drain inlet protection BMPs.

Note: Clean trucks, equipment, tools in designated equipment washing facility where wash water will not drain to storm system.



When patching asphalt or concrete:

Key steps to remember

1. Install BMPs to protect nearby catch basins/storm drain inlets and adjacent watercourses before starting work.
 - CB sock
 - Inlet Cover Mat
 - Coir Logs
2. If saw-cutting concrete, vacuum up the slurry and dispose at the decant/washout facility at the Asphalt Plant.



Saw trailer with vacuum



When patching asphalt or concrete:

Key steps to remember

3. Install patching material.
4. **Sweep up excess materials** and dispose of properly. May need to call Sweeper truck.
5. Remove storm drain inlet protection BMPs.



Saw trailer with vacuum



When striping pavement:

Key steps to remember

1. Avoid painting when rain is likely or during high winds.
2. Install BMPs to protect nearby storm drain inlets, as necessary. Remove when work is complete.
3. Transfer and load paint or thermoplastic pavement marking materials away from storm drain inlets.



When striping pavement:

Key steps to remember

4. Calibrate and test pavement marking equipment in a controlled area away from storm drain inlets.
5. When marking is complete, clean equipment in a well-ventilated area, contain wash water and dispose in sanitary sewer.



When deicing:

Key steps to remember

1. Use salt brine mixed and stored in the Upper Yard and apply to roadway prior to snow or freezing events.
2. Use road salt to reduce ice build-up during snow events.
3. Apply to designated routes only to minimize amount of salt in runoff.
4. Sweep/clean up any accumulated deicing and anti-icing materials and grit from roads as soon as possible after the road surface clears.



Deicing salt storage



Brine tank



When flushing pavement:

Key steps to remember

1. Install BMPs to protect nearby storm drain inlets and adjacent watercourses before starting work.
 - Inlet Cover Mats
 - Berms
2. Plug outlet pipe in nearest downstream catch basin to contain cleaning washwater (and remove plug when finished).



When flushing pavement:

Key steps to remember

3. Use a water tank truck to flush the sediment out of the street and into the catch basin.
4. **Station an vacor truck at the catch basin** to suck flushed sediment out of the catch basin.
5. **Dispose of vacor waste** at approved decant facility.



Field Assistance

Need some help with your BMPs?

Call any time:

502-2222



Environmental Services Department - Environmental Compliance Team

Available 24/7

**What to watch for in the
field...**

City Staff Water Pollution Call-in Line

(253) 502-2222

Same easy
number!

Please call if you notice:

- Muddy construction site track-out or runoff
- Accidental spills or illegal dumping
- Car washing, power washing with soapy water
- People hosing or washing away oil, paint, or other garbage into the street or down the storm drain
- Oily sheen or colored liquid
- Chemical or sewage smell
- Sudsy foam
- Garbage accumulation in or around catch basins
- Liquid seeping from garbage dumpsters
- Hoses connected to catch basins
- What else have you seen?



You are our eyes in the field...



Review Questions

Question #1

Which of these BMPs should be used on every job?

- a) Silt fence
- b) Good housekeeping – sweeping up excess material
- c) Inlet protection
- d) Straw mulch

Question #2

When repairing a roadway, what is the last step to remember for your BMPs?

- a) Install BMPs to protect nearby storm drain
- b) Vacuum up concrete slurry
- c) Sweep up excess paving materials
- d) Remove storm drain inlet protection

Question #3

Call the Staff Water Pollution Call-in Line (253-502-2222), if you see which of the following:

- a) People hosing or washing away oil, paint, or other garbage into the street or down the storm drain
- b) Oily sheen, muddy runoff or sudsy foam
- c) Car accident
- d) Garbage accumulation or liquid seeping from garbage dumpsters
- e) A, B and D

Quiz Answers

- Question #1: b)
- Question #2: d)
- Question #3: a),b) and d)