# 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:

<b>Suggested BMP Strategies</b>	Recommended BMPs
<b>Keep Water Away from</b>	Schedule work for dry weather.
Area	Cover stockpiles. Berm around
	work area with sandbags, etc.
<b>Good Housekeeping</b>	Sweep area when job is
	complete.
<b>Spill Prevention</b>	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

- Install BMPs to <u>protect nearby catch</u>
   <u>basins/storm drain</u> 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. <u>Cover stockpile materials and berm around</u> 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. <u>Catch drips from paving equipment</u> (when not in use) with absorbent material or pads.
- 2. Install pavement. Apply emulsified tack coats carefully, avoiding overspray and contact with stormwater.
- **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:

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











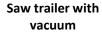


#### When patching asphalt or concrete:

- 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.













## When striping pavement:

- 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.
- Transfer and load paint or thermoplastic pavement marking materials <u>away from</u> <u>storm drain inlets</u>.



#### When striping pavement:

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



#### When deicing:

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







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## When flushing pavement:

- Install BMPs to <u>protect nearby storm</u> <u>drain inlets</u> 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:

- Use a water tank truck to flush the sediment out of the street and into the catch basin.
- 4. Station an vactor truck at the catch basin to suck flushed sediment out of the catch basin.
- **5.** <u>Dispose of vactor waste</u> 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

#### 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 <u>last step</u> 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 (253-502-222), 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)