



Speaker

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Project Inspector

Responsible for conducting independent inspections of DOT-HWYS Contract Construction projects in accordance with DOT-HWYS National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit on Oahu.



Site Management/ Good Housekeeping Measures

PART 1

- Concrete
- Sawcutting
- Hazardous materials storage & Labeling
- Construction entrances & Alternatives

PART 2

- Drip protection
- Construction materials storage
- Stock/spoil piles
- Portable Toilets
- Solid Waste

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Inspection

- Look for drip pad/pan in an appropriate place
- Check for other leaks and protection
- Check equipment in use for leaks
- Spill kits readily available
- Check stationary cranes for drip pads
- Check for protection in place when maintenance is being done

Pad or Pan

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"Cookie Sheet Pans"

- Commercial pan
- Not a good choice for construction sites
- Light and little capacity
- Must be completely level
- Primarily designed for warehouse or motor pool use

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Cranes

- Normally operate from static position
- Need drip pad to cover radius of swing
- A "must" near open waters or streams

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Paving Equipment

- Need protection under hopper and roller assembly in addition to engine block
- Can produce oil slick without protection in the rain
- Pay special attention to the spray arm on distributor trucks
- Fabric needs to be changed when saturated

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Mobil Staging of Paving Equipment?

- Scroll can be created in any size
- Oil absorbent on top with barrier material underneath
- Roll up and tuck on equipment
- Can be one man deployment
- Only thing you have to add is a berm on the downslope side

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Construction Material Storage

- Store under cover or in containers
- Store away from discharge points
- Prevent contact with rain water
- Rebar and galvanized steel will create a point source for pollution if not covered properly



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Construction Material Rebar



Not covered

- Provide protection from rain water
- Rack off ground
- Cover by either overhead cover or plastic
- Will work for galvanized poles




Racked and covered






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General storage



- Static structures
- Can be set up for hazardous material as well as construction material
- Metal containers must be covered or stored on an angle to prevent rusting.

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Inspection of Stock/Spoil Piles

- Check for cover – if it has fines – must be covered
- Check for pile perimeter control – not the same as staging area perimeter control
- Check area where pile is placed – not in a dry stream bed or near water body

NOTE: Cover is for both wind and water erosion



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Cover




- Very few piles are too big to cover
- Cover must be plastic not fabric
- Exception is landscape mulch which may be covered with fabric due to fire risk
- If too large to cover – hydro mulch with tackifier will help with wind erosion




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Perimeter Protection



- Appropriate for task
- Install per manufacturer's specifications
- Best to install a distance from base of pile to allow ponding

Erosion control matting (not appropriate) – too close to base

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Inspecting Portable Toilet

- Check for secured from tipping over
 - Prevailing wind
- Check for placement
 - Drains
 - Traffic





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Securing Toilet




- Stake
- Tie
- Out of wind

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Solid Waste

- Not often sited

Look for:

- Trash Bins – Covered
- Can the trash become a pollutant?
 - Scaffolding
 - Water ways and drainage structures

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Trash Bin Covered




- Roll off bins leak
- Protect from rain water
- Cover with plastic
- Alternative covers
 - Sliding cover
 - Overhead cover



Scaffolding



- Prevent debris from dropping of scaffold
 - Kick boards/snake bags/biosocks
 - Plastic/fabric




- No kick board
- Working over stream
- Nails on scaffold and stream bed
- Kick boards in place behind plastic
- Grinding & Finishing operations



Waterways and Drainage



- Biggest source of trash/debris is from work
- Clean up scarp as you go
- Wood is light and can move
- Rain can move in suddenly



Inlet side



Scrap lumber in river bed – outlet side



Scrap lumber in intercept or ditch



Questions?

