

# **Construction Site BMPs**

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# Construction Site Control Program

- **Six BMP categories**

- Erosion Control
- Sediment Control
- Good Site Management
- Non-Stormwater Management
- Run-on and Run-off Control
- Active Treatment Systems (ATS)

# Best Management Practices

- **Prevent pollutants from leaving the site**

- **SEDIMENT**

- Concrete washout
  - Paint
  - Oil and grease
  - Litter
  - Waste
  - Construction materials



Source: Michigan DEQ

- **By preventing**

- Contact with stormwater runoff
  - Mobilization of pollutants
  - Illicit discharge

# Best Management Practices

- **Inspectors don't select BMPs to use**
- **Ask questions**
- **Know appropriate use**
- **Recognize proper installation**
- **Observe if maintenance needed**
- **Note if additional controls needed**

# Construction Site Exit

- **Entrance/Exit Stabilization- look for:**
  - Sediment in gravel/rumble plates
  - Signs of other exits
  - Track out in streets









## Wrong rumble plates orientation









# Construction Site Exit

- **Additional BMPs may be needed**
  - Street sweeping
  - Wheel wash



Sediment Control

# Good Site Management

13. <u>Good Site Management</u>		
<input type="checkbox"/> Soil Stockpiles		
<input type="checkbox"/> Waste Systems Management		
<input type="checkbox"/> Construction Materials (wood, cement, ...)		
<input type="checkbox"/> Hazardous Materials (paint, solvents)		
<input type="checkbox"/> Petroleum Products (oil, fuel)		
<input type="checkbox"/> Vehicle Servicing		

# Good Site Management

- **a.k.a. Good housekeeping**
- **Materials that have potential to be pollutants in stormwater**
  - Material storage/use
  - Waste storage
  - Stockpiles
  - Porta potties
  - Waste disposal





# Good Site Management

- Keep stormwater from coming into contact with materials that can mobilize
- Keep materials from being exposed
- Keep materials from leaking
- Keep potential discharges from leaving the site (e.g., placement)
- Safety and disposal issues



# Good Site Management

## ■ Check for

- Designated concrete washout areas
- Covered and contained stockpiles
- Covered and elevated material storage
- Placement of portable toilets and secondary containment.



# Good Site Management

## ■ Stockpiles

- Cover when not being used
- Protect all year long
- Placement (e.g. not in gutter)
- Berm around stockpile or upstream side



# Good Site Management

## ■ Concrete Washout

- Large enough for volume expected
- Lined – prevent contact with or leaching into soils
- pH issue
- Dispose of hardened concrete









# Non-Stormwater Management BMPs

14. <u>Non-Stormwater Management</u>		
<input type="checkbox"/> Concrete/Stucco washout area		
<input type="checkbox"/> Architectural copper rinsewater		
<input type="checkbox"/> Other:		

# Non-Stormwater Management

- **Activities that have potential to discharge**
  - Potable water use
  - Paving/grinding operations
  - Vehicle/equipment use, cleaning, fueling and maintenance
  - Concrete work
  - Waste and recycling disposal



# Non-Stormwater Management



- Place drip pans, tarp, or containers under leaky vehicles/equipment
- Fix leaks promptly
- Fuel, repair and wash equipment/vehicles off site

# Other BMP Categories

## ■ Run-on Controls

- Keep water from off-site, upstream property from flowing through construction site
  - May bring off-site pollutants
  - May increase stormwater runoff flows
    - causing erosion or
    - overwhelming BMPs

## ■ Runoff Controls

- Manage stormwater flow to prevent erosion or flooding at downstream location



# Other BMP Categories

## ■ Active Treatment Systems

- Adds chemicals for coagulation, flocculation and/or filtration
- Not common - expensive
- State General Permit requires
  - ATS Plan: O&M manual, monitoring, sampling, spill prevention plan,
  - Designated operator and training
  - Data recording system
  - Numeric effluent limits for discharge

# Contact Information

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