Construction Site BMPs

Peter Schultze-Allen EOA, Inc.

March 16, 2021



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

By preventing

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



Source: Michigan DEQ



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









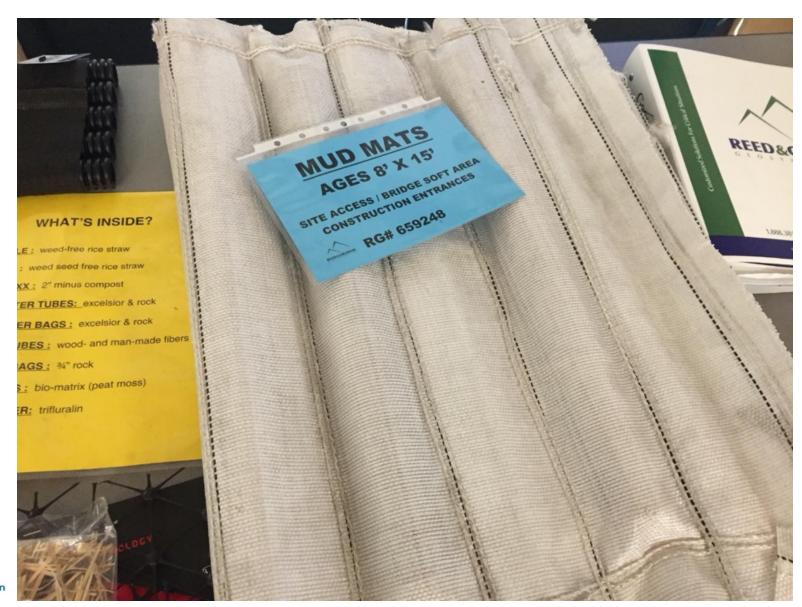








Wrong rumble plates orientation









Construction Site Exit

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







13.	Good Site Management		
		Soil Stockpiles	
		Waste Systems Management	
		ConstructionMaterials (wood,cement,)	
		Hazardous Materials (paint, solvents)	
		Petroleum Products (oil, fuel)	
		Vehicle Servicing	



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





- 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





Check for

- Designated concrete washout areas
- Covered and contained stockpiles
- Covered and elevated material storage

Placement of portable toilets and secondary

containment.







Stockpiles

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





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.	Non-Stormwater Management	
	☐ Concrete/Stucco washout area	
	☐ Architectural copper rinsewater	
	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





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

Peter Schultze-Allen pschultze-allen@eoainc.com 510-832-2852 x128

