
Developments in Construction Site Stormwater Regulation: Effluent Limits and Monitoring

International Erosion Control Association

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Effluent Limitation Guidelines

- Recently USEPA released proposed Effluent Limitations Guidelines for the construction and development industry
 - Establish the nationwide minimum regulation for construction stormwater NPDES permit
 - Proposes minimum BMPs and numeric effluent limits

State Construction Stormwater NPDES Permits

- Several states have issued or are considering issuing permits with numeric limits and monitoring requirements for construction site runoff
 - Georgia
 - Oregon
 - Washington
 - California
 - Others??
- Numeric limits take form of action levels, benchmarks and effluent limitations

Forum Presenters and Participants

- *Jesse Pritts, PE – Project Manager for USEPA Construction Effluent Limitation Guidelines*
 - Review of USEPA's proposed Effluent Limitation Guidelines for the Construction and Development Industry
- *Robert Patterson, National Director of Environmental and Safety Compliance, Pulte Home Corporation / Del Webb*
 - Mean cost of ELG requirements to the Home Building Industry

Forum Presenters and Participants

- *Cory Taylor, CPESC, Environmental & Safety Manager - Eastern US, Beazer Homes USA, Inc.*
 - Georgia's experience implementing construction stormwater monitoring and meeting effluent limits
- *Eric Berntsen, PH, CPESC, CPSWQ – CA Construction General Permit Writer*
 - California's next steps - proposed effluent limitations and sampling permit requirements for construction sites

Forum Presenters and Participants

- *Environmental Perspective*
 - Factsheet handout from Audubon and Water Keepers
- *You*

Presentations by Panelists

USEPA proposed minimum BMPs

- EPA proposes the following three sets of BMPs as the minimum BMPs required of all construction sites subject an NPDES stormwater permit
 - 13 minimum erosion controls
 - 8 minimum sediment controls
 - 7 minimum pollution prevention controls
- Unless specifically noted, sites are obligated to implement these BMPs

Minimum erosion controls

Erosion Control Measure	
1	Stabilize disturbed soil immediately on any area when final grade is reached or when work on this portion will not resume for a period exceeding 14 calendar days.
2	Control stormwater volume and velocity within the site to minimize erosion.
3	Minimize soil exposure for the duration of the project and amount of project disturbed simultaneously.
4	Control stormwater discharges both peak flow & volume leaving the site to prevent erosion at the outlet, stream bank, & channel.
5	Preserve topsoil & natural vegetation.
6	Minimize soil compaction on areas that will not contain permanent structures & where compaction is not needed for structural integrity utilize deep ripping, de-compaction techniques, & add organic matter to restore infiltrative capacity.
7	Provide & maintain natural buffers around surface waters.

Minimum erosion controls

	Erosion Control Measure
8	Minimize construction of stream crossings.
9	Sequence or phase construction to minimize extent and duration of exposed soils.
10	Minimize disturbance to steep slopes.
11	Implement slope erosion controls.
12	Stabilize exposed soils using temporary or permanent vegetation, mulch, rolled erosion control products, or polymers & tackifiers.
13	Divert stormwater away from disturbed areas of the site.

Minimum Sediment Controls

	Sediment Control Measure
1	Establish & maintain perimeter controls where runoff could be discharged; discharge through vegetated areas or functioning stream buffers.
2	Control discharge from site fences using a vegetated filter strip or buffer at least 6 feet in length.
3	Minimize slope length and install linear sediment controls along toe, face, and grade breaks.
4	Establish & use stabilized construction entrances. Install, use, & maintain wheel washes.
5	Remove sediment & other pollutants from paved surfaces daily. Washing prohibited unless water is directed into on site sediment control.
6	Establish, use, & maintain controls to minimize sediment and other pollutants entering storm drain inlets.
7	Control sediment & other pollutants from dewatering activities. Dewatering prohibited unless treated to minimize pollutants. Comply with local or state standards for dewatering.
8	Install sediment basins for common drainage locations that serve an area of 10 or more acres disturbed at one time.

Minimum Pollution Prevention Controls

	Pollution Prevention Control
1	Prohibit discharge of construction wastes, trash, & sanitary wastes in runoff.
2	Prohibit discharge of washouts from concrete , stucco, paint, etc.
3	Prohibit discharge of fuels, oils, & other pollutants from vehicle operation and maintenance.
4	Prohibit discharge from washing vehicles & equipment with soap.
5	Prohibit discharge from washing vehicles & equipment without soap unless treated in a sediment basin or other equally effective sediment control on site.
6	Minimize exposure of stormwater to construction materials, landscape materials, & other liquid and dry products.
7	Prevent stormwater from contacting uncured concrete to minimize changes in stormwater pH.