

**ODEQ OKR04 General Permit
Workshop
Minimum Control Measure #5**

**Post-Construction Management in
New Development and
Re-Development**

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Six “Minimum Control Measures”

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
- 5. Post-Construction Management**
6. Pollution Prevention and Good Housekeeping

Runoff Is More Than Rainwater



From construction sites:

Sediment

Fertilizers

Chemicals (e.g. solvents, paint)

Herbicides / Pesticides

Oil / gasoline

Trash and debris (“floatables”)



Definitions

- Post-construction – *after construction activities have been completed*
- New development – *construction in areas that previously have had no constructed development, including pipelines and other utilities.*
- Re-development – *“...refers to alterations of a property that change the “footprint” of a site or building in such a way that there is a disturbance of equal to or greater than 1 acre of land. The term does not include such activities as exterior remodeling.”*

What Regulations and Permits Apply to Post-Construction Activities ?

- ODEQ's General Permit for Construction Activities (OKR10)
- ODEQ's General Permit for Phase II MS4 Discharges for Small Cities (OKR04)
- Local Codes and Ordinances in Phase I and II cities resulting from ODEQ Stormwater Permit implementation
- Local Codes and Ordinances regardless of Phase I / II status

Post Construction in OKR10

- Deals mainly with active construction, not “post-construction”
- Nonetheless, requires “final stabilization” of site
- Relies upon local codes to address “long term” stormwater management

“Stabilization”

“Stabilization means covering or maintaining an existing cover over soil. Cover can be vegetative (e.g., grass, trees, seed and mulch, shrubs, or turf) or non-vegetative (e.g., geo-textiles, riprap, or gabions).”

“Stabilization practices may include:

- (1) Establishment of temporary or permanent vegetation;
- (2) Mulching, geo-textiles, or sod stabilization;
- (3) Vegetative buffer strips;
- (4) Protection of trees and preservation of mature vegetation.”

verbatim from ODEQ Stormwater Regs for Construction (OKR10)

Who Complies With What ?

Construction Industry:

1. *>1 acre disturbance = comply with OKR10.*
2. *All Local Codes of Phase II cities.*

Phase II Cities and Counties:

1. *Obtain blanket coverage under Part VIII.A of OKR04.*
2. *Otherwise, comply with OKR10 and OKR04 for each project > 1 acre.*
3. *Must adopt ordinances for construction and post-construction within your city limits.*

Phase II Counties – Can't Adopt Ordinances:

1. *Use / create authority under county zoning and building codes.*
2. *Coordinate with ODEQ's enforcement under OKR10.*

OKR04 Post-Construction Requirements

(from Part IV.C.5.a)

(Nearly word for word from *EPA's model MS4 permit*)

- 1) [must]...”Develop, implement and enforce a *program to address stormwater runoff* from new development and redevelopment projects that disturb greater than or equal to one acre...”
- 2) [must]...”Develop and implement strategies which include a combination of *structural and/or non-structural...BMPs* ...”
- 3) [must]...”Use an *ordinance or other regulatory mechanism* to address post-construction runoff...”
- 4) [must]...”Ensure adequate long-term *operation and maintenance of BMPs.*”

OKR04 Post-Construction “Rationale”

(from Part IV.C.5.b)

- “You must document your decision process...[and] address your overall post-construction SWMP and the individual BMPs, measurable goals and responsible persons for your program.”

OKR04 “Rationale” Minimum Requirements in Your SWMP

(from Part IV.C.5.b)

- 1) “A description of your program... including any specific priority areas...”
- 2) “How the program... [is] tailored for your local community, minimize water quality impacts, and attempt to maintain pre-development runoff conditions.”
- 3) “Any non-structural BMPs in your program...”
- 4) “Any structural BMPs in your program...”

*cont...OKR04 “Rationale” Minimum
Requirements in Your SWMP
(from Part IV.C.5.b)*

- 5) “Describe the mechanisms (ordinance or other regulatory mechanism) you will use...”
- 6) “How you will ensure the long-term operation and maintenance (O&M) of your selected BMPs.”
- 7) “Identify who is responsible for overall management and implementation...”
- 8) “How you will evaluate the success of this [MCM]...”

OKR04 Post-Construction Requirements

(from Part IV.C.5.a)

1) [must]...”Develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre...”

Implies a cradle to grave program:

- *Comprehensive*
- *Local control*
- *City-specific problems / solutions*
- *Local control = flexibility*
- *Many program options*

OKR04 Post-Construction Requirements

(from Part IV.C.5.a)

2) [must]...”Develop and implement strategies which include a combination of *structural and/or non-structural...BMPs* ...”

Examples of “**Structural BMPs**” from Part IV.C.5.b(4) :

- *Wet ponds*
- *Extended-detention outlet structures*
- *Grassed swales*
- *Bio-retention cells*
- *Sand filters*
- *Filter strips*
- *Infiltration basins and trenches*

OKR04 Post-Construction Requirements

(cont. from Part IV.C.5.a)

2) [must]...”Develop and implement strategies which include a combination of *structural and/or non-structural...BMPs* ...”

Examples of “**Non-Structural BMPs**” from IV.C.5.b(3):

Policies and ordinances that:

1. Direct growth to identified areas
2. Protect sensitive areas (e.g. wetlands, riparian areas)
3. Maintain or increase open space
4. Provide buffers along sensitive water bodies
5. Minimize impervious surfaces
6. Minimize disturbance of soils and vegetation
7. Encourage infill development in higher density urban areas

cont. OKR04 Post-Construction Requirements

(cont. from Part IV.C.5.a)

2) [must]...”Develop and implement strategies which include a combination of *structural and/or non-structural...BMPs ...*”

[More **Non-Structural BMPs** from Part IV.C.5.b(3)]

- Education Programs for developers and the public
- “Other Measures such as...”
 - Minimization of the percentage of impervious area after development
 - Minimize directly connected impervious areas
 - Source control measures...(good housekeeping)