



Post-Construction Storm Water Questions and Answers Small Construction Activities (< 2 acres)

The NPDES construction general permit (CGP) requires a post-construction storm water best management practice (BMP) on all disturbed areas one acre or larger. Recognizing the challenges of limited space, more flexibility in BMP implementation is afforded to activities authorized under the CGP where the common plan of development or sale will result in less than two acres of earth disturbance. These less than 2-acre activities are referred to as small construction activities.

Are the standard Table 4a and 4b post-construction BMPs required on small construction activities?

Post-construction BMPs must ensure compliance with Ohio's Water Quality Standards contained in Ohio Administrative Code (OAC) 3745-1. Ohio EPA believes these requirements will be met with Table 4a and 4b post-construction BMPs designed to treat the water quality volume (WQv) by detaining it for 24- to 48-hours (depending on the BMP selected). As such, these criteria should generally be applied to all development sites, regardless of size.

Although it may be impractical to locate surface detention facilities on small sites, standard BMPs including permeable pavement, sand or media filters, underground detention/infiltration, bioretention cells and infiltration trenches are well suited for small drainage areas. If space constraints or other factors (soil permeability, underground utility conflicts) preclude the use of these practices, a non-standard BMP may be selected to treat storm water runoff for pollutants and to reduce the adverse impacts on receiving waters.

What non-standard BMPs may be used?

The post-construction BMPs that will be installed must address the anticipated impacts on the channel and floodplain morphology, hydrology and water quality. BMPs should be selected to treat the pollutants and storm water concerns associated with the proposed land use.

In some instances, water quality goals may be achieved on small construction activities using a combination of soil amending, vegetative filter strips, conservation areas, grass swales, rain barrels, storm water planters, rain gardens and roof gardens, or using a subset of these practices in conjunction with standard practices. Proprietary practices may be options where they can be shown to provide the treatment needed. All practices should be designed to discharge at a non-erosive velocity.

Are non-standard BMPs required to treat the WQv?

Ohio EPA does not explicitly require that BMPs selected for small construction activities be designed to treat the WQv and drain it down over a prescribed time period. However, the BMPs listed in Table 4a or 4b, the runoff reduction practices and many proprietary BMPs must be designed per the WQv or the water quality flow (WQf) criteria to ensure compliance with Ohio's Water Quality Standards.

How is the need for a non-standard BMP documented?

As outlined in the CGP, every Storm Water Pollution Prevention Plan (SWP3) must contain a written rationale for the selection of the post-construction BMP(s). The rationale must justify the use of a non-standard BMP by explaining the factors limiting the use of a standard practice and how treatment goals will be met. Additionally, an operation and maintenance plan must be provided to the future owners or operators for all BMPs, standard or non-standard.

Does Ohio EPA review non-standard BMPs?

Non-standard practices on small construction activities do not require a review by Ohio EPA but will require approval from the local community. Note that local storm water regulations may be more restrictive in the types of BMPs permissible and should be consulted during the BMP selection process.

Contact

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