

Responsiveness Summary to Comments Received on Draft Statewide
Storm Water Construction General Permit (CGP) OHC000003

Grandfathering

- (1) Comment: The permit should allow grandfathering of 1-5 acre industrial and commercial projects regarding post-construction best management practices (BMPs) where plans are almost complete or have been approved by localities. Many commenters requested that the requirement be deferred for 6 months to one year.

Response: The main issue that caused many to request “grandfathering” of new requirements for 1-5 acre construction activities is the proposed requirement of detaining the Water Quality volume (WQv) for 24 to 48 hours. The post-construction requirements of the final NPDES CGP renewal for 1-5 acre sites have been revised to those in the previous CGP (OHC000002); therefore, there are no new requirements to be “grandfathered.” When making this revision Ohio EPA considered the timeframe in which our stakeholders had to review and comment upon this significant change, reviewed records regarding how many 1-5 acre projects had been permitted during the programs history, the number of potential requests for the use of alternative BMPs, our available resources to review those requests, and the potential impacts on regulated municipal separate storm sewer systems (MS4s) who will be implementing these regulations on the local level over the coming years.

Ohio EPA hopes to be able to work with stakeholders, as some have offered, so as to develop criteria for alternative, to those in the permit, BMPs that could used on 1-5 acre sites routinely. Additionally we hope to be able to work with stakeholders to better familiarize them with currently accepted BMPs in an effort to increase their knowledge, comfort level, and confidence in using them. In this way we believe full implementation of post-construction on 1-5 acres sites will be achieved in the next generation of the CGP which is consistent with the direction of the national program.

Alternative Post-Construction BMP Requirements

- (2) Comment: It is unclear when alternative post-construction BMP can be used.

Response: Ohio EPA encourages the use of the structural post-construction BMPs listed in Table 2 of the CGP because those BMPs have a proven performance history of improving water quality and reducing hydrologic impacts to receiving streams. Also maintenance

OHC000003 Responsiveness Summary

7/22/2008

Page 2 of 11

procedures are readily available and relatively straight forward to perform. In order to use alternative BMPs the permittee must first evaluate the feasibility of implementing the Table 2 BMPs on their individual project. If the permittee believes the Table 2 BMPs are infeasible for a particular project, the permittee may propose alternate controls to Ohio EPA for approval. Please note, in light of the previously mentioned CGP revision, see item (1), this is the same procedure in current use, although the renewal does encourage the use of "green infrastructure/non-structural" BMPs which is a more flexibility approach than the current permit.

- (3) Comment: What alternative BMPs can be used and how does a permittee demonstrate an alternative BMP is equivalent in effectiveness to those in Table 2 of the permit.

Response: Ohio EPA is first requiring that claims regarding the effectiveness of alternative BMPs be verified through the The Technology Acceptance Reciprocity Partnership (TARP) protocol for Stormwater Best Management Practices Demonstrations. TARP sets standards for testing of stormwater practices to insure a consistent and meaningful evaluation. The process was developed by several states working in conjunction with one another and has been officially endorsed by California, Massachusetts, Maryland, New Jersey, Pennsylvania, and Virginia. Once a TARP verification of 80% Total Suspended Solids removal has been documented Ohio EPA will accept use of the practice for pollutant removal purposes. In most cases these types of practices do not address hydrologic issues and that may need to be addressed by a second BMP.

- (4) Comment: Why are green roofs and pervious pavement considered alternative BMP rather than listed in Table 2?

Response: Currently Ohio EPA does not have sufficient data to establish relationships between WQv and green roofs or pervious pavement. Although, reductions in the runoff coefficient for a site can be addressed thereby reducing the WQv for the site and the size of a structural BMP. It is important to note that green roofs or pervious pavement only address a portion of a site and not the entire site. The CGP would allow the use of green roofs and/or pervious pavement to satisfy the redevelopment criteria on a 1:1 area basis.

- (5) Comment: Can an underground BMP with a maintenance alarm be acceptable?

Response: Yes, provided the underground facility meets the intention of permit requirements for pollutant removal and stream protection verified through TARP protocols, including an effective maintenance agreement.

OHC000003 Responsiveness Summary

7/22/2008

Page 3 of 11

- (6) Comment: Since OEPA approved hydrodynamic separators for use in ODOT's L&D manual, why can't these be accepted for non-road projects?

Response: Ohio EPA and ODOT worked together for several years on post-construction issues relating to roadway projects. ODOT has demonstrated unique circumstances regarding their projects and has committed to performing onsite studies on its alternative BMPs to confirm that they are equivalent in effectiveness. For residential and commercial development if a hydrodynamic separator or any other alternative or manufactured BMP can meet the TARP protocol standards and achieve an 80 percent or larger reduction of total suspended solids (TSS), then the proposed BMP can be used so long as the hydrologic impact to the receiving streams is negligible.

- (7) Comment: What is the "physical limitation" at a site, which will allow the use of an alternative BMP?

Response: An example might be local ordinances requiring a substantial amount of area being used for parking; thereby, not leaving enough space for the BMPs listed in Table 2. It should be remembered that some of the Table 2 BMPs could be incorporated into landscaping of the site.

- (8) Comment: The 80% TSS removal rate is very site specific and particle size must be a consideration.

Response: The TARP protocols take into consideration the type and nature of pollutants that can be expected from urban runoff. The particle size of solids is also considered. If a BMP documents 80% TSS removal through the TARP process Ohio EPA will accept its use for pollutant removal purposes and will post-it on our website.

- (9) Comment: Manufactured systems can increase green space and promote storm water infiltration.

Response: The Ohio EPA would be open to reviewing such a proposal. In addition to demonstrating the manufactured BMP is equivalent in effectiveness we would need legal assurances that the green space would be protected during the life of the site.

OHC000003 Responsiveness Summary

7/22/2008

Page 4 of 11

- (10) Comment: Is there an easier way to verify equivalence to a surface BMP?

Response: Currently, Ohio EPA recognizes the TARP protocol and may recognize other testing protocols in the future. Alternate testing may be considered based on specific site locations and Ohio EPA approval

- (11) Comment: Many states have a list of pre-approved BMPs. Why not Ohio?

Response: Ohio EPA plans to develop a list of approved BMPs as alternate controls are verified through acceptable protocols. Ohio EPA does, however, recognize that site specific restrictions will apply.

- (12) Comment: The TARP protocol should be referenced instead of ETv since ETv is no longer active.

Response: Since the TARP protocol references other protocols, including ETv, Ohio EPA has removed the ETv reference in the CGP. As Ohio EPA accepts other standardized testing protocols they will be added to our Post-Construction Question & Answer document on our website.

- (13) Comment: BMPs like permeable pavements, green roofs, and rain barrels should also be tested or monitored just like other manufactured BMPs.

Response: Any proposed alternative that is intended to substitute for a Table 2 BMP would require a demonstration that it meets the intent of the post construction section regarding pollutant removal and stream protection.

- (14) Comment: Alternative BMPs accepted by TARP protocol, which detain WQv for 24 hours should be accepted without prior OEPA approval.

Response: Any alternative BMP that can verify 80% TSS pollutant removal through the TARP process and protects hydrologic impacts could be accepted.

- (15) Comment: Underground extended detention, permeable pavement, and hydrodynamic separators have been accepted by many jurisdictions so these should be standard.

Response: Although the alternative BMPs may have been accepted by localities, very few alternative BMPs have gone through a standardized testing protocol demonstrating they will function per the manufacturer's claims. Ohio EPA goal is to insure alternative BMPs function as intended.

OHC000003 Responsiveness Summary

7/22/2008

Page 5 of 11

- (16) Comment: Since most BMPs cannot achieve 80%TSS removal (except for 81% TSS removal by retention ponds), the removal efficiency must be reduced.

Response: The 80 percent TSS removal standard is commonly used by other states and was referenced by USEPA in the past. Alternative BMPs are held to higher standards since they lack the performance history of the BMPs listed in Table 2 of the CGP. Ohio EPA will review performance data of standard BMPs as well as alternative BMPs and would note any changes to the performance standard in the Post-Construction Question & Answer document.

- (17) Comment: OEPA should make "request for alternative BMP" forms and MS4 should be copied on the response.

Response: Ohio EPA agrees with the sentiment of the comment that the Agency needs to coordinate its approval of alternative BMPs with regulated MS4s and will work towards doing so. Also please note that the CGP was revised indicating that local requirements could be more restrictive or less flexible than those in the permit.

Post-Construction Maintenance Agreement

- (18) Comment: Do post construction BMP maintenance agreement requirements need to be recorded with the deed?

Response: Recommended but not required. The permittee must demonstrate a legally binding document to ensure the BMP will be maintained by the future operator or a government entity.

- (19) Comment: How are post construction maintenance agreements to be implemented and required?

Response: The permittee is required to establish a stand alone document with appropriate maintenance criteria, which is legally binding, and turn it over to the entity who will be responsible for future, after termination of CGP coverage, maintenance of the BMP.

- (20) Comment: It is misleading for the CGP to state that permittees are not responsible for long-term maintenance (when coverage is terminated). This should be removed.

Response: The CGP has been revised to clarify who is responsible for BMP maintenance after permit coverage has been terminated. The original language was meant to say that the original permit holder is not

OHC000003 Responsiveness Summary

7/22/2008

Page 6 of 11

responsible for post construction BMP maintenance once coverage is terminated, but the permittee is responsible for ensuring a system is in place to ensure that maintenance will be performed after permit coverage is terminated. See response to Comment 18.

- (21) Comment: Would a small business owner be required to contract with an agency, public or private, for this maintenance work?

Response: Ohio EPA would expect the developed site owner to contract with a professional to conduct maintenance activities versus doing it themselves. If an operator was not to perform the required maintenance in a timely manner; thereby, creating a nuisance condition a locality might do it and asses a fee.

- (22) Comment: Maintenance plans must also include: a funding mechanism for the operation, maintenance, repair, replacement for the post-construction BMPs; construction drawings showing location of the storm sewer system, and post-construction BMPs; and a copy of the recorded plat or survey of the property showing the bounds of the site and easements and be recorded at the County Recorder's Office in which the site is situated.

Response: As previously mentioned Ohio EPA will require a legally binding document to ensure the intended function of the post construction measures. The agency will be working closely with regulated MS4s to establish an effective maintenance agreement. Ohio EPA can provide background information regarding funding mechanisms or storm water utility fees.

- (23) Comment: Is an individual home builder in a new subdivision required to develop the post construction BMP maintenance plan?

Response: No, it is expected that the developer of the project would determine the site post construction BMPs and associated maintenance plan.

- (24) Comment: Will some post-construction BMPs require separate NPDES permits?

Response: Normally residential and commercial development projects will not need a permit for post construction BMP discharges. If the discharge is from an industry required by 40 CFR 122.26(b)(14) to obtain an NPDES industrial storm water permit or Ohio EPA's Director designates a discharge due to water quality impairment, then a permit would be required.

OHC000003 Responsiveness Summary

7/22/2008

Page 7 of 11

- (25) Comment: Maintenance agreements exceed scope of construction activities and should be removed.

Response: The intent of the maintenance agreement is to ensure the function of the post construction BMP in perpetuity. Continued assured maintenance is critical to the long term functioning of the BMP to protect water quality. The purpose of the program is to protect water quality as areas are developed.

Redevelopment Projects

- (26) Comment: Redevelopment sites that do not increase impervious surface should be exempted from post-construction or be allowed to use manufactured devices.

Response: Ohio EPA recognizes the impacts from developed sites which existed prior to the storm water regulations. In order to mitigate for this impact, the regulations require 20 percent treatment of the WQv or 20 percent reduction in impervious area (or any combination of the two). Also please see the response to comment (4) regarding the use of green roofs and pervious pavement. The use of manufactured systems may be considered as an alternative BMP.

- (27) Comment: Requirements on redevelopment sites will deter urban redevelopment and increase urban sprawl.

Response: In light of the CGP revisions between the draft and final permit the renewal basically contains the same requirements as the previously effective permit. The amount of runoff from redeveloped areas to be treated is reduced by 80% over initial developing areas. Also please see the response to Comment (26).

- (28) Comment: What if a post construction BMP was installed when the site was originally developed?

Response: We would not expect the redevelopment of a site to lessen the amount of runoff treated by a post construction BMP. The 80% reduction in runoff to be treated for redevelopment sites was intended for sites where no post construction BMP existed prior to redevelopment. The permit redevelopment language has been revised to account for this situation.

OHC000003 Responsiveness Summary

7/22/2008

Page 8 of 11

- (29) Comment: A clear definition of “redevelopment” is needed.

Response: The redevelopment language has been revised to indicate the reduction in WQv to be treated is only for sites being redeveloped that did not previously have post construction BMPs.

Offsite Post-Construction Mitigation

- (30) Comment: Who will review these on a case-by-case basis?

Response: Generally speaking, our district storm water coordinators conduct case-by-case reviews for projects that fall within their respective districts.

- (31) Comment: What is meant by “retrofit” and how is it applied?

Response: There are many ponds associated with developments which were constructed prior the storm water regulations. It was our intent to allow the modification of these ponds for post construction water quality treatment. The modification would include a retrofit to the outlet structure to incorporate water treatment. These ponds have the potential to be used for off-site mitigation purposes.

- (32) Comment: Why is the mitigation ratio 1.5 to 1 just because it’s offsite?

Response: We are offering mitigation as an option for treating post-construction runoff in an effort to be more flexible than the current permit. This additional flexibility will require more resources be expended on our part and will make it more difficult to ensure continued operation and maintenance will be performed. Therefore, Ohio EPA felt it appropriate, as is the case in our wetland program, to require mitigation at the rate of 1.5 to 1.

ODOT & Road Transportation Projects

- (33) Comment: The General Permit should clarify that advanced mitigation (or regional post construction BMPs) is an acceptable approach to address storm water runoff from ongoing and planned roadway, as well as, other local projects.

Response: The Ohio EPA believes permit allows for this approach.

- (34) Comment: It should be made clear that alternative BMPs may be used on municipal public projects without approval from ODOT's central office.

Response: The permit language has been revised to allow other levels of government working on roadway projects to either follow ODOT's L&D manual or the conditions of the permit. When a locality chooses to rely on ODOT's L&D manual it is not Ohio EPA's intent to require the locality to seek approval from ODOT's Central Office. As stated previously in this responsiveness summary, localities may have more restrictive requirements based on their own authority than the final CGP.

- (35) Comment: Can an exemption be included for projects that are installing just pedestrian paths (sidewalks and bike paths) outside of a larger project?

Response: If grass or other permeable vegetation exists on each side of the sidewalk or bike path, then additional post-construction BMPs would not be required. If there is not vegetated areas near the path another option could be the use of a pervious pavement alternative. In these situations it is recommended the permittee contact their district storm water coordinator.

- (36) Comment: After reviewing ODOT's January 2008 L&D Manual it appears that projects begun prior to January 18, 2008 may not require post construction BMPs.

Response: Structural post-construction BMPs have been required for public roadway construction activities since March 10, 2006. The January 18, 2008 edition of ODOT's Location and Design manual simply provided more options and flexibility with choosing post-construction BMPs. The agency is willing to assist in evaluating alternatives and ensure a reasonable solution for roadway projects well into the design phase.

Prohibition of structural BMPs in a stream

- (37) Comment: It's important to know which streams are "State surface waters" (e.g., roadside ditch).

Response: This prohibition would only be applicable to "surface waters of the State" as defined in the Ohio Administrative Code. Ohio EPA will try to provide guidance on its website as to how to determine what qualifies as a surface water of the state. When in doubt contact your district storm water coordinator.

- (38) Comment: Are MS4s liable if they inadvertently authorize post-construction BMPs within streams and wetlands?

OHC000003 Responsiveness Summary

7/22/2008

Page 10 of 11

Response: There is a potential liability given the draft MS4 permit requires the implementation of the 3rd Generation Construction Permit. Ohio EPA is willing to work with any municipality to ensure the location of any BMP is not constructed in, what is considered “waters of the state”. In addition, should a question arise as to what constitutes “surface waters of the state”, please contact your district storm water coordinator.

20% of WQv for Sediment Storage

- (39) Comment: The increase of 20% WQv is an unnecessary increase in an already conservative approach.

Response: Ohio EPA believes the 20 percent requirement is essential to ensure a point of removal for the accumulation of sediments resulting from extended detention; otherwise, there is a potential for settled sediment to re-suspend and discharge during the following precipitation event. In addition this would reduce the potential of clogging of the water quality orifice which would result in a direct bypass of the WQv.

- (40) Comment: Ohio EPA should delete the requirement that dry basins must include forebays and micropools sized at 10 percent of the WQv (Part III.G.2.e, note under Table 2) since in the summer months, it will be exceptionally difficult to maintain adequate depth and flow in these structures.

Response: Ohio EPA highly recommends utilizing the design criteria in the Rainwater and Land Development Manual which addresses the concerns stated in this comment. Also see comment (39).

Subcontractor SWP3 Signature Requirements

- (41) Comment: What is the purpose of the SWP3 signature requirements for Sub-Contractors and what if all subcontractors have not been identified by the time a project is to start?

Response: To ensure all subcontractors are aware of the conditions of the general permit and the SWP3 prior to their initiating work. The permit language has been revised to clarify subcontractors can sign on once identified as long as they do so prior to initiating their activities.

- (42) Comment: Who will enforce the contractor signature requirement and will this be reviewed during an inspection.

Response: It is the permittee or co-permittee obligation to comply with permit requirements. In this case the permittees must ensure that

OHC000003 Responsiveness Summary

7/22/2008

Page 11 of 11

subcontractors sign the acknowledgement. The acknowledgement document certainly could be reviewed during an inspection. Ohio EPA has received many comments in the past regarding subcontractors and their actions which lead to violations of the general permit