

## **Responses to Miscellaneous Comment Received on Draft Statewide Storm Water Construction General Permit OHC000003**

INTRODUCTION: This responsiveness summary is intended to address additional issues/comments that were not addressed in the document entitled "Responsiveness to Comments Received on Draft Statewide Storm Water Construction General Permit (CGP) OHC000003." These comments were received during the public notice comment period of the CGP but were not judged significant regarding changes made between OHC000002 and OHC000003. Therefore, in an effort to issue the renewal in a timely manner and to avoid delaying Notice of Intent (NOI) processing/permitting we did not prepare formal responses to all the comments that follow. Please be assured all were reviewed and considered prior to permit issuance. Many comments had to do with small suggestions regarding punctuation or language revisions and in some cases we revised the permit accordingly, but this summary does not include each of those comments.

Comments were received questioning the appropriateness of post-construction storm water management requirements being included in the CGP vs. being left to NPDES permitted Municipal Separate Storm Sewer Systems (MS4s) to implement. Post-construction NPDES permit requirements originate in US EPA's November 16, 1990 Phase I initial storm water regulations. Ohio EPA believes post-construction requirements are appropriate in the CGP for several reasons. First there is the environmental impact of storm water from post-developed areas in terms of pollutants and the potential impairment on receiving waters from increased flows. It should be remembered that not all construction activity occurs within regulated MS4s. In addition, US EPA is currently developing its "Construction and Development" effluent guidelines that Ohio EPA understands will set prescriptive national requirements addressing construction and post-construction to be included in all NPDES permits. Also the CGP was sent to US EPA for its review for compliance with federal regulations and it did not object to its issuance. It should also be remembered that Ohio EPA has included post-construction requirements in its CGPs since 1992.

Some commenters questioned whether Governor Strickland's executive order entitled "Implementing Common Sense Business Regulation" applied to the CGP. The Ohio EPA does not believe it does because the underlying regulations that the CGP is based upon already exist in the Ohio Administrative Code (OAC). The regulations addressing which storm water discharges are to be regulated can be found in OAC 3745-39. The regulations allowing the use of NPDES general permits can be found in OAC 3745-38.

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### Cover Sheet

- (1) Comment: Why would it be acceptable to allow a lowering of water quality in some areas of the state due to social and economic factors but yet others have to comply because there isn't any social or economic concerns? Water quality is water quality and should be upheld regardless of location (comment in reference to paragraph 2 on page 1 of the permit).

Response: The permit language is an acknowledgment in accordance with OAC 3745-1-05 that by authorizing storm water discharges associated with construction activities that some pollutants will be released to surface waters of the State. The conditions of the statewide construction storm water general permit applies to all regulated construction sites that are not addressed by a more restrictive general or individual NPDES permit.

### Part I.A

- (2) Comment: Request was made to include the oil and gas exploration, production, processing, treatment operations and transmission facilities exemption for construction storm water permitting per rule OAC 3745-39-04(A)(2)(b).

Response: Ohio EPA believes the rules dictate which sites require a permit and that the permit is the mechanism to authorize discharges from those sites; therefore, the Agency didn't believe it necessary to make mention of non-regulated sites within the permit. Also the exclusion to the oil and gas sites originates with the federal Energy Act of 2005 so Ohio EPA believes the industry is well aware of the exemption. Ohio EPA has included a link to federal exemption and associated Fact Sheet on its Construction Storm Water web page.

### Part I.B

- (3) Comment: Part I.B – Eligibility - Permit needs to highlight that utility workers and contractors need to have awareness regarding site specific BMPs including wetland locations, set-back requirements, and other site details. These contractors should sign off that they have been made aware of these site conditions and are expected to abide by the conditions.

Response: Part III.E. of the permit requires such entities to sign a document acknowledging such items. Utility contractor which meet the definition of operator (anyone who has operational control as it relates to permit compliance see Part VII.O) will be considered a co-permittee.

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- (4) Comment: *Part I.B.5 Duty to Report Unintended Releases* should also require the permittee to report unintended releases due to failure of a dewatering system, failure of a sediment basin, incursions into wetlands or any other BMP failure that causes sediment (“mud”) discharges to State Surface Waters. Also the permittee should be required to report such releases to OEPA within 30 minutes of the recognition of the release or the incursion. The commenter also recommended that the permittee develop an emergency action plan as part of the SWP3 to address these situations quickly and that in-stream water quality testing would be required to evaluate damage to receiving waters.

Response: Part I.B.5. is based on a federal regulation regarding hazardous substances. There are inspection requirements in Part III.G.2.i. and operation and maintenance requirements in Part V.N. of the permit that Ohio EPA believes are adequate to address the issues raised by the commenter.

- (5) Comment: Page 3 of 40 – Part I.B.1 - 1<sup>st</sup> paragraph - Additional language for “storm drain” should be incorporated such as conveyance channels and ditches.

Response: Ohio EPA believes this is understood in what is considered a separate storm sewer system.

- (6) Comment: Page 3 of 40 - Part I. B.2- 2<sup>nd</sup> paragraph - Many times clearing is the only “construction” operation that is happening where no land disturbance is proposed – Could there be a potential for a category to cover this – such as an “abbreviated” plan.

Response: The general permit is intended to cover the vast majority of construction storm water dischargers, in the situation described by the commenter an individual NPDES appears appropriate.

- (7) Comment: - Page 5 of 40 – Part I.B.4 - The permit list of authorized non-storm water discharges should also include those from geothermal open loop systems.

Response: The list of acceptable non-storm water discharges listed in Part I.B.4 of the general permit was obtained directly from U.S. EPA’s July 1, 2003 NPDES construction general permit. Geothermal open loop systems are similar to non-contact cooling water systems, which do require separate NPDES permits due to the temperature of the discharges.

- (8) Comment: Part 1.B.2.a - This section appears to indicate that post construction activities are not covered by this permit. However Part

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III.G.2.e specifically addresses post construction storm water management requirements. If the permit is intend to address post-construction it needs to be modified.

Response: Once final stabilization is achieved coverage under the construction general permit (CGP) should be terminated. The CGP does require the installation of a permanent structural post-construction best management practices (BMPs) during construction and assurances that it will be maintained, but the discharge from the BMP after CGP coverage is terminated does not require an NPDES permit normally for residential and commercial development. If the site was developed for an industry with a regulated storm water discharge then a different NPDES permit would be required for that discharge. The CGP was modified to help clarify these matters.

- (9) Comment: Part 1.B.3.b (TMDL Waiver) - This is section is very difficult to interpret and understand. Would it possible for this statement to be rewritten in a manner that is easier to interpret what the intent is. From reading this, it would appear that if a surface water body has a TMDL established that no water quality control is needed? Is this the case? What is the purpose of this section?

Response: In order to obtain this waiver, an approved TMDL or equivalent stream analysis must show that the receiving stream is not impaired, in particular, for sediment and can receive sediment-laden runoff from a small (1-5 acre) construction activity. The general permit contains federal waiver language that can be found at 40 CFR 122.26(b)(15).

- (10) Comment: Part I.B.1.d. - The subsection includes language which allows non-contiguous off-site borrow pits and soil disposal areas serving only one project to have permit coverage with that project. Additional language regarding size and distance from the main project area is needed to discourage abuses.

Response: The SWP3 must address the construction site as well as the offsite borrow/spoil area. If the borrow/spoil area serves more than one project, the operator of the borrow/spoil area must obtain separate permit coverage and develop a SWP3. This concept was permissible under the previous permit without any recurring patterns of abuse being observed.. If the agency encounters widespread abuse, then the Agency will address the issue.

- (11) Comment: Part I.B.1 – Page 3 of 40 - Add utility line installation to the definition of construction activity.

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Response: The existing language is federal language and would include utility line installation.

- (12) Comment: Part I.B.1 - The draft permit should clearly define “common plan of development or sale,” as the lack of a clear definition of this term results in confusion both for the regulated community and the Agency.

Response: This definition is located in Part VII.J of the general permit, which is taken directly from federal language. If this definition is not adequate more information can be found on Ohio EPA or U.S. EPA’s web pages. Also Ohio EPA staff can be contacted for further discussion.

- (13) Comment: Part I.B.1, 2<sup>nd</sup> paragraph, last sentence: Use of the wording “The threshold acreage includes...” makes reference to the word “one” in the first sentence. That wording refers to not a single value but a specific size and then “or more.” I suggest considering using “The threshold acreage (one acre) includes...” in the last sentence to establish the threshold value.

Response: We did not fully understand the point being made and did not change the language. The language is intended to convey the concept that the disturbance does need to be contiguous to trigger the need for a permit, the disturbance of one or more acres only needs to occur within a “common plan of development or sale”.

- (14) Comment: Page 5 of 40 top left of the page, labeling is inconsistent throughout the document. For example on this page it is “Part I.B.3” yet simply “Part I.B” on pages 4 and 6.

Response: The label on the top left of each page varies based on exactly where the page change interrupts the condition of the general permit.

- (15) Comment: Part I.B.4, middle of first paragraph: “..footing drains..” should read “footer drains.

Response: Ohio EPA kept the existing language to remain consistent with the federal general permit language.

### Part I.D

- (16) Comment: Part I.D., Page 7 - We request that Ohio EPA provide a standard letter/template that can be used by the permittee to notify the individual lot owner. This will ensure OEPA’s intent and the permittee’s obligations are consistently satisfied.

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Response: Ohio EPA believes the existing Individual Lot NOI application and Instructions address the issue.

- (17) Comment: Part I.D: Both commercial and residential development typically involves the transfer of lot ownership to individuals or owners other than the developer of the property during construction activities. Attempting to track ongoing permit responsibility for multiple owners will become confusing and difficult. It would be less complex and more effective to require the initial permit holder to maintain responsibility for all property until the site(s) are finally stabilized. The initial developer and subsequent property owners can maintain separate agreements as necessary regarding the transfer of responsibility of the permit without complex OEPA or other agency involvement.

Response: Although Ohio EPA agrees conceptually, the Agency believes its legal ability to require the initial permittee to be responsible for a parcel sold to a builder is limited. We believe requiring the original permittee to maintain the centralized control (e.g., detention pond) is our best alternative.

- (18) Comment: We support the SWP3 requirement to include typical standard drawings of erosion control specifications for individual lots also apply to developments with centralized sediment control.

Response: Ohio EPA believes the use of centralized controls is the most effective way of addressing sediment from a large multi-parcel development and believes the permit is written to encourage their use. When granting any individual lot coverage Ohio EPA provides guidance to the lot owner on what BMPs to use on its lot but we don't feel it necessary or practical to require the original SWP3 to address individual lots in all situations. Localities may choose to impose such a requirement on their own authority.

### Part I.E

- (19) Comment: Part I.E - Could the design engineer be copied on the authorization letter as well as the permittee?

Response: Ohio EPA has accommodated this type of request in the past and certainly a request could be made under Ohio's Open Records law. The problem for us is one of resources both of administrative staffs' time, which detracts from the processing of other NOIs, and additional mailing costs. Our goal is to have the approved NOIs easy accessible through our web site for anyone to see.

- (20) Comment: Part I.E.2. requested additional language in the subparagraph entitled "No release from other requirements" to reference local

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environmental requirements such as contained in local ordinances; this additional language will assist MS4 communities in educating contractors that local storm water control requirements must also be met.

Response: Ohio EPA believes this request is fulfilled by the language in Part III.G.3 entitled "Approved State or local plans."

### Part II.A

- (21) Comment: Part II.A - Are there any submittal time frames associated with co-permittee coverage prior to being onsite?

Response: No, timeframes are stated in the general permit; however, Ohio EPA expects the other operators to submit Co-Permittee NOI applications once they are identified.

- (22) Comment: Ohio, as US EPA does currently, should accept electronic submission of the NOI and NOT forms to alleviate unnecessary delays in the permitting process.

Response: It is Ohio EPA's goal to accept electronically submitted NOI and NOT forms in the future. We will not be able to use US EPA's system without some alterations associated with state specific requirements.

### Part II.D

- (23) Comment: Part II D, Additional notification - We suggest that the notification described in the last sentence be broadened to include all discharges to underground tiles.

Response: The permit authorizes discharges to surface waters of the state whether they are direct or via a separate storm sewer system. NPDES regulated municipal separate storm sewer system (MS4) operators have their own permit requirements relating to construction activities; hence, they are specifically mentioned.

### Part II.E

- (24) Comment: Part II.E – Renotification - This needs better clarification as to what is expected by the current projects and how long the renotification is applicable.

Response: Ohio EPA will write permittees regarding the re-issuance of the construction general permit. Permittees will be instructed to sign a request, a form will be enclosed with the letter, asking coverage to be continued and

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to mail it back to Ohio EPA within 90 days of receipt. Otherwise permit coverage will be automatically terminated. The continuing coverage will be valid until after the next general permit is re-issued or the permittee terminates coverage by submitting a Notice of Termination (NOT).

- (25) Comment: Emergency NOI - Would apply to an operator conducting construction activities that was not intended to disturb one or more acres of land, but due to unforeseen factors exceeds one acre, may file an Emergency NOI. The emergency NOI will be valid until a NOI could be submitted and SWP3 developed.

Response: The agency believes this would be an inappropriate use of its limited resources because it provides no environmental benefit, it would provide legal protection for the operator. If an operator was to encounter this situation, and we assume the disturbance would not be much larger than an acre, they should immediately install BMPs to insure they do not create a problem discharge. Next they should prepare an SWP3 and submit an NOI as quickly as possible.

### Part III.A

- (26) Comment: Part III.A. - Private Sites – One community requested clarification on the intent of having a “stand-alone document” for the SWP3. The community maintain it has required very comprehensive stormwater management plans along with soil erosion and sedimentation controls on sites. It would prefer (if they are to be the ones reviewing and managing this program as a regulated MS4) to modify the requirements for these documents/submittals to include the SWP3 requirements. Public sites, for their public projects, they have also required that the E&S Controls be part of the plans. They would prefer to not require separate documents for their own projects as well.

Response: The Agency included this language due to compliance issues that staff had experienced onsite. In far too many cases the SWP3 was not readily accessible because it was hidden within a larger plan. This resulted in failure for the contractors to comply with the conditions of the permit due to the fact the SWP3 was not available onsite for implementation. Ohio EPA reviewed this language and considered the community’s comments; however, the agency feels this will result in overall better compliance statewide.

- (27) Comment: Page 10 of 40 – Part III.A - It should be clarified that a storm water management report, which is part of the SWP3, be acceptable as supporting calculations and considered as part of the SWP3 to avoid duplicating information on plan sheets which is irrelevant to construction.

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Response: Ohio EPA believes this issue has been resolved by requiring a stand alone SWP3.

- (28) Comment: Part III A- Lack of requirement to submit SWP3 to the Director. Requiring SWP3 be submitted 10 days after written notification by the Director or his authorized representative allows adequate time for abuse of non-submittal. The OEPA should change the time for submittal to five business days to eliminate this tendency.

Response: Ohio EPA understands the risk of someone developing a SWP3 quickly to hide the lack of compliance, but allowed for 10 days for the operator to produce a copy with maps and sheets. The SWP3 is also required to be onsite and available for review by Ohio EPA.

### Part III.B

- (29) Comment: Part III.B - What is the intent or definition of “initiation” within “Initiating Construction Activities”? Please provide clarification here to avoid confusion.

Response: The SWP3 must be implemented at the time construction activity is started.

- (30) Comments: Part III.B. - A community commented that it may choose to be stricter in their local process of reviewing and approving projects. Also this section does not include how to handle projects under design.

Response: The permit does not preclude municipalities from adopting more restrictive local storm water regulations and as previously mention acknowledges that possibility in Part III.G.3. Ohio EPA believes projects currently in design should not be a problem in light of how the post-construction requirements were altered from the draft permit, and in how Ohio EPA will implement its renotification process for existing permittees. Ohio EPA will allow several months prior to requesting permittees renotify for continuing coverage; thereby, providing them the opportunity to start construction and being only accountable to OHC000002.

- (31) Comment: **Continuation of Coverage Part III.B (Timing)** - The first and second sentences of this section are nearly identical, but establish opposite permit requirements. We believe that Ohio EPA omitted the word “not” from the second clause.

Response: The commenter was correct and the permit was modified accordingly.

### Part III.C

- (32) Comment: Part III.C.1 Page 10 of 40 - If a plan is signed by a Professional Engineer (PE) in the State of Ohio this certification is inferred by the licensing of the PE. If a plan is done by any other person other than a PE there is issues that can legitimately be raised that the person is practicing engineering without a license.

Response: The plan is not required to be signed by a PE. Generally a PE signature is required by the local municipality in the event of permanent post construction practices.

- (33) Comment: Part III.C.3. and D. - Please add to include the local jurisdictions on any revisions made to the plans.

Response: Our intention is to coordinate with local programs. We did not make the requested change. We thought it best such a requirement be implemented at the local level and that specific direction given as to where SWP3 revisions are to be sent.

- (34) Comment: **Part III.C.2.a: SWP3 Signature Review and Operational Responsibility** - The SWP3 should require more detailed contact information regarding co-permittees and should be available on-site to members of the public, in particular watershed coordinators.

Response: Part III.C.2.c. of the permit provides a mechanism for the public to obtain copies of SWP3s. Ohio EPA does not have the legal authority to write a permit requirement that would allow citizens to enter a construction project and request to see or a copy of a SWP3.

- (35) Comment: Part III.C.2.c - The draft permit states... "However, the permittee may claim to OEPA any portion of an SWP3 as confidential in accordance with Ohio Law." We ask specifically what Public Laws are referenced in this statement?

Response: Potentially patent infringement laws as it relates to new technology relating to specific treatment for storm water. Please keep in mind we would specifically address this on a case by case basis should this issue ever arise.

- (36) Comment: Part III.C.2.c - Public access to reports should be required in the same timely manner as requests from the Director.

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Response: Ohio EPA retained the language that was in the draft and the previous permit, OHC000002. Ohio EPA is responsible for enforcement of the permit; therefore, we believe it appropriate to request information be provided by the permittee to us in relatively short timeframes. The permit would allow third parties to contact the permittee directly or contact Ohio EPA for a copy of SWP3s or related reports.

### Part III.F

- (37) Comment: Part III.F.-Total Maximum Daily Load Allocations (TMDLs) - The permit says a TMDL could cause the Director to require specific changes to an SWP3 including post-construction requirements, a grandfathering clause should be included for these situations.

Response: In the event the Director does require specific BMP's in response to a TMDL, the agency would provide guidance to achieve the goals of the TMDL. This may be completed via a specific watershed construction permit. The Big Darby, to date, is the only specific watershed construction general permit that has been issued. In that case, Ohio EPA did allow existing sites to continue coverage under the baseline construction general permit without SWP3 revision.

### Part III.G.1

- (38) Comment: Part III.G.1.h, pg 13: If the permittee is an MS4, we question the value of performing additional work to document points of discharge into their own system and suggest that requirement be removed.

Response: The purpose of the requirement is to identify how the discharge reaches waters of the state. Ohio EPA thinks this requirement is consistent with the MS4 program illicit discharge detection and elimination measure and does not believe it places a burden on MS4s, the permit was not revised.

- (39) Comment: Part III.G.1.c - Is this the runoff coefficient utilized for calculating the water quality volume?

Response: Yes the runoff coefficient must be used to determine the WQv

- (40) Comment: Part III.G.1.h. - It seems appropriate to ask applicants to identify the point of discharge to the MS4, but it may be requiring too much of applicants to know where the MS4 system discharges to surface waters of the State.

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Response: This is important information for Ohio EPA to know whether for a TMDL or assessing impacts from possible spills from the site. Ohio EPA believes this information can be obtained from the local jurisdiction when going through the building permit process.

- (41) Comment: Part III.G.1.m - What information is to be included in this log?

Response: Clear information to ensure the 21 day rule is not violated.

- (42) Comment: Part III.G.1.n.iv - The distance requirement seems far for linear public projects. The local jurisdiction should have some leeway on this as they have the best understanding of their storm water system and watersheds within their corporation limits.

Response: The agency included this language in order to evaluate potential impacts to surface water resources as a whole from the construction activities.

- (43) Comment: Part III.G.1.h - Page 13 of 40 - A clear definition on what “near” means should be provided. A distance would be preferred so it is black and white.

Response: The Agency believes the key to this requirement is the determination as to whether the site will or has the potential to impact the resource.

- (44) Comment: Part III.G.1.k - Page 13 of 40 - It seems as a waste of paper to have a complete copy of this permit attached to every SWP3 – why not just reference it.

Response: The agency believes it is important for a copy of the general permit to be on-site for permittees and co-permittees. It could be useful for the permittee’s own reference when an Ohio EPA inspector is not on-site.

- (45) Comment: Part III, Paragraph G.1.h should be revised to read: For discharges to an MS4 or other buried drainage line, the point of discharge to the MS4 or other line and the location where the water ultimately discharges to a stream or State surface water must be indicated;

Response: Ohio EPA did not believe that this change was necessary since buried drainage lines (e.g., drainage tiles) also have to be indicated.

**Part III.G.2.a**

- (46) Comment: Part III.G.2.a and Part III.G.2.d.iii.v indicate a recommended buffer that operators should leave undisturbed along a surface water of the state is 25 feet as measured from the ordinary high water mark of the surface water. Clearer language should be included to indicate a buffer must be established 'on each side' of the ordinary high water mark. If the indication of a required buffer is too strict, then language indicating mitigation should be included in the event the buffer cannot be established due to some unforeseen circumstance.

Response: Since the ordinary high water is on both sides of the stream, the setback is being recommended for both sides of the stream.

- (47) Comment: Part III.G.2.a- Non Structural Preservation Methods - Recommended buffer width should be extended to 50 ft. for construction activities near non-impaired waterways and 100ft for construction activities near impaired waterways. OEPA's significant expenditures to bring impaired waterways up to designated use standards warrants extension on buffer widths as a cost effective means to prevent increased sediment loads.

Response: Extended buffer zones are requirements of watershed specific NPDES general permits where the required buffer zone is validated through a TMDL process.

**Part III.G.2.b**

- (48) Comment: Part III.G.2.b, Table 2, Temporary Stabilization, needs clarification on language requiring temporary stabilization within 50 feet on each side of a State surface water.

Response: Comment considered, we believe the requirement is appropriate as written. The stabilization needs to be done on the area disturbed. It's possible that not both sides of state surface water would be disturbed.

- (49) Comment: Part III.G.2.b.i. & other areas - The draft permit references "State surface waters". Should this be "surface waters of the State" as is used in other Ohio EPA documents?

Response: Ohio EPA revised the language accordingly.

- (50) Comments: Part III.G.2.b: The temporary stabilization requirements of III.G.2.b(i) provide redundant and unnecessary requirements to construction activities that are already required to maintain structural sediment controls in

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the form of settlement basins, silt fencing etc. It is impractical and costly to potential development projects in Ohio to require the re-seeding of areas that are likely to be disturbed several times throughout the construction process. As long as storm water is being directed to engineered structural sediment control measures as required by this permit, the temporary seeding work is unnecessary and wasteful. It is further impractical, considering Ohio's climate, to consider any permanent or temporary seeding activity during the cold and dormant months of November through March. Seeding activity should be limited to appropriate seasons with structural erosion controls being relied on for water quality protection during the winter months.

Response: Structural Practices are limited in removing suspended solids from storm water run-off. The most effective means to reduce sediment loadings to streams from construction is stabilization. Please keep in mind, if weather conditions prohibit the establishment of a vegetative stand sufficient to control erosion, alternates such as crimp mulching, mulch with tackfier, mulch with netting...etc, may be considered.

- (51) Comment: Part III.G.2.b.i - Prior to paving, there are limited suitable options for temporary stabilization of incomplete roadways. Compacted sub-bases would require temporary stabilization according to permit language. The seasonal production and temperature limitation of concrete and asphalt can result in uncompleted roadways that the permit would require be stabilized for the winter. Incomplete roadways of compacted gravel base graded for runoff to a curb and gutter storm water systems or roadside ditches that concentrate flow typically outfall to centralized sediment control and; therefore, not need temporary stabilization.

Response: Based on our experience with temporary stabilization associated with roadway construction, we feel the application of a temporary cover is crucial to overall site stability. In many cases, the contractor leaves during the winter, with minimal maintenance to storm water controls. A gravel cover or base on the roadway is considered a suitable alternative to erosion protection.

### Part III.G.2.c

- (52) Comment: Part III.G.2.c. - Please clarify how this is to be evaluated. Some communities have strict release rate requirements that could eliminate the need for velocity dissipaters. In certain circumstances, the installation of the dissipater could cause more damage.

Response: If release rates prove to be non-erosive, it would be considered an acceptable alternative.

**Part III.G.2.d**

- (53) Comment: Part III.G.2.d.ii - The requirement for settling ponds will be difficult in urban areas. The rule allows for alternative methods with the same effectiveness as a sediment settling pond. How is this determined? There are many number of ways to determine the effectiveness of an alternative device. Is it based on mass balance, removal efficiency, TSS, SSC, etc. What is the basis for comparison? Who establishes what the effectiveness of the pond? Depending on the documentation referenced it is possible to designate any number of ratings for a pond's effectiveness? If this requirement is to be put in place, then the method for determining effectiveness and comparison should be established so that the method and basis is clear from the outset.

Response: Based on the design criteria for a sediment basin, Ohio EPA expects a properly designed, constructed and maintained sediment basin to remove 80 percent of the TSS in the runoff. The standard of comparison should be based on capacity and minimum drawdown times described in the permit. If a pond cannot be constructed, then additional measures should be taken such as partitioning or phasing disturbance to limit drainage areas and/or the duration of disturbance. Other measures to increase the effectiveness of practices could be utilized such as the use of flocculants. Part III.G.4 of the general permit allows for exceptions if site specific conditions prohibit sediment controls.

- (54) Comment: The use of RUSLE or similarly accepted erosion protection model is vague. How do you establish that another program is acceptable?

Response: It's up to the permittee to demonstrate that the alternative erosion control model is similar to the RUSLE method. Ohio EPA will review requests on a case-by-case basis.

- (55) Comment: Part III.G.2.d.ii. - The sizing requirements for the settling basins could be difficult to attain on a public roadway project. Are other options available to meet this need?

Response: Please refer to ODOT's L&D Manual, Volume Two, Drainage Design.

- (56) Comment: Part III.G.2.d.iii. - We do not understand why a series of silt fences appropriately placed on a slope is not adequate.

Response: Ultimately the lowest silt fence on the landscape should be within the drainage area described in the permit or the Rainwater and Land

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Development Manual or it has a high risk of failure. One-hundred linear feet of silt fence is intended to detain sheet flow runoff from ¼-acre to ½-acre of land. If the first row of silt fence cannot pond the runoff, then the second row will also fail.

- (57) Comment: Part III.G.2.d.iv, pg 19 - The practice of providing a sediment basin for any inlet receiving runoff from drainage areas of one or more acres is one of multiple other practices that may be used to control sediment laden runoff. For linear transportation projects with multiple catch basins located in series, sediment basins should not be the only approach allowed for inlet protection. With previous projects involving drainage areas greater than one acre that drain to multiple catch basins in series, we have been successful in providing erosion and sediment control using a combination of controls that include dikes at inlets, standard inlet protection and filter fabric ditch checks. The combination of these practices provides an equal and much more feasible method of providing the necessary sediment and erosion control for linear transportation projects. We suggest adding the following to Part III.G.2.d.iv: "Linear transportation projects may use a combination of temporary sediment and erosion control practices, which may include sediment settling ponds, to minimize sediment laden water entering active storm drain systems." The use of filter fabric and ditch check dam is only considered an erosion control practice.

Response: Designers collecting more than an acre of drainage via an inlet must choose how to provide more effective sediment control by either providing a settling pond at the inlet or at the outfall of the storm sewer. The language is written to discourage the use of the inlet protection, or other less effective means (than settling ponds) as the sole or primary practice. Many of these practices are implemented to minimize ditch erosion and should not be substituted for the requirements of sediment control that must address a sediment storage volume.

- (58) Comment: Sizing a storm water sedimentation basin based on the entire offsite contributing drainage area. Low lying areas with large drainage basins (i.e., near streams) would result in excessively large sediment basins. Also, the permittee should not be responsible for sediment or pollution being contributed to the sediment pond from upgradient drainage areas outside of their control/ownership.

Response: Ohio EPA recommends diverting away the offsite runoff using diversion berms or ditches. Otherwise, the sediment settling pond must include offsite runoff or it will not function as intended.

- (59) Comment: "When determining the total contributing drainage area, offsite areas and areas which remain undisturbed by construction activity must be

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included unless runoff from these areas is diverted away from the sediment settling pond and is not co-mingled with sediment-laden runoff.” This language contradicts with the earlier statement of “A sediment pond is required for any one of the following conditions: concentrated storm water runoff (e.g. storm sewer or ditch). Diverting clean water around a site generally requires the installation of a storm sewer or ditch (swale, channel, etc.)

Response: There is no contradiction. The permit is not concerned about concentrated flows of clean runoff. A sediment settling pond is required for concentrated, sediment-laden runoff. The offsite runoff diversion of clean runoff is not directed to the sediment settling pond, but allows facilities to be sized for primarily disturbed areas. Offsite runoff should be diverted away from disturbed areas to avoid further erosion. Also, diverting offsite water away will reduce the minimum size of the sediment settling pond.

- (60) Comment: The 5 foot maximum depth, as it relates to children should be removed. While protection of children is vital, it should not be part of an NPDES permit. Design requirements in the NPDES permit should solely relate to the intent of the NPDES program. It is not clear how a 4.9 foot pond allows for better protection of children than a 5.1 deep pond. Alternative control measures such as fences may better serve to protect children.

Response: The purpose of the maximum depth was not included in the permit for child safety, but rather to prevent short-circuiting the pond. Sediment pond performance is directly related to pond surface area. Limiting the depth of the sediment basin to less than five feet, and optimally to less than three feet, encourages designs that remove more sediment. The concentrated flow inlet and pond outlet must be spaced far enough apart from one another to allow for effective settling of suspended solids.

- (61) Comment: Is silt fence comparable to straw bale dikes and straw wattles? Can they be interchanged?

Response: Straw wattles are a very effective as sediment controls when installed in the same manner as filter socks as described in ODNR’s Rainwater and Land Development manual. Ohio EPA is concerned that storm water runoff may bypass improperly installed straw wattles or filter socks by flowing through the rills or gullies underneath. Straw bales are less effective than properly installed silt fence or other sediment barriers due to the seams in between each straw bale and due to the junction of bales every few feet.

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- (62) Comment: Part III.G.2.d.ii - Is the 1000 cubic foot sediment zone, part of or in addition to, the 1800 cubic foot dewatering zone?

Response: The 1000 cubic foot per disturbed acre is in addition to the 1800 cubic foot per drainage acre. The outlet remains at the same elevation, but the pond is deeper for the sediment settling zone.

- (63) Comment: Part III.G.2.d.ii and Part VII.D (Concentrated Storm Water Runoff) The draft states that a "A sediment settling pond is required for any one of the following conditions: concentrated storm water runoff (e.g., storm sewer or ditch); The example of storm sewer or ditch imply large drainage areas rather than the collection of storm water runoff in simple drainage patterns. Suggest using the following or similar instead: "(e.g. storm sewer outfall or drainageway)".

Response: Judging from the comments received, this confusion is not prevalent. Most equate a ditch with a drainageway. The key statement is "concentrated storm water runoff."

- (64) Comment: Part III.G.2.d.iii.iv. Inlet Protection - The draft permit states: "All inlets receiving runoff from drainage areas of one or more acres will require a sediment settling pond." Additional language may be needed to stress that inlet protection is not to be utilized as the primary or sole sediment control due to its poor effectiveness. The Rainwater and Land Development manual states: "Inlet protection is installed to capture some sediment and reduce the maintenance of storm sewers and other underground piping systems prior to the site being stabilized. Due to their poorer effectiveness, inlet protection is considered a secondary sediment control to be used in conjunction with other more effective controls. This practice is generally not recommended as a primary means of sediment control. Storm drain inlet protection has limited capacity to control silts and clays, and is most effective in capturing larger sand-sized particles. It should only be a primary means if it is not possible to divert the storm drainage to a sediment trap or sediment basin, or if it is to be used only for a short period of time during the construction process."

Response: Good comment, however the agency believes the current language addresses this situation by stating that the design capacity will not be exceeded.

- (65) Comment: Page 18 of 40 – Part III.G.2.d.ii - There should be a clear definition between a sediment trap and a sediment basin since the design specifications in the Rainwater and Land Development Manual are clearly different as well as noting the applicability of each.

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Response: Design Criteria of sediment traps and sediment basins are described in ODNR's Rainwater and Land Development manual. Sediment traps are intended for drainage areas under 5 acres and have an outlet of riprap with geotextile. Sediment basins have a riser pipe outlet with small holes and wrapped with geotextile.

- (66) Comment: The length to width ratio should be a minimum of 4:1 to match the Rainwater and Land Development Manual.

Response: Ohio EPA believes that this length to width ratio may be very difficult to achieve based on site conditions and kept the 2:1 ratio and recommended the 4:1 ratio.

- (67) Comment: Page 19 of 40 – Part III.G.2.d.iii - Suggest that the slope length table from the Rainwater and Land Development Manual be utilized in lieu of this table. It is a clearer easier to understand table.

Response: Ohio EPA believes that the table as stated is sufficient to address the intent.

- (68) Comment: Regarding public safety and micropools, forebays and extended detention with permanent pools in residential subdivisions, if OEPA doesn't provide public safety design criteria (not guidance) for both sediment control structures and structural post-construction requirements, as mentioned elsewhere in the permit, then public safety comments should be removed from the permit.

Response: Ohio EPA disagrees. Public safety requirements include having a maximum side slope in the pond design. Forebays and micropools should not be designed deep enough to be of concern.

- (69) Comment: Part III.G.2.d.v and e: these provisions should be revised to only apply to jurisdictional surface waters of the United States.

Response: Ohio law regarding the surface waters of the State, including wetlands, is broader than jurisdictional waters of the United States.

- (70) Comment: Part III.G.2.d.ii - To remain consistent with the 2006 Edition of the Ohio Department of Natural Resources' Rainwater and Land Development Manual, the Utilities recommend that this section of the permit include a statement that smaller sediment basins **and/or** sediment traps may be used for drainage locations serving less than five acres.

Response: The Agency believes that the language in the general permit allows for the use of sediment traps for drainage areas under 5 acres.

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Although the language requires basins to serve drainage areas of greater than 5 acres, the definition of “sediment settling ponds” in Part VII.X of the general permit includes traps as well as basins.

- (71) Comment: Part III, Paragraph G.2.d.iv. - The requirement for sediment settling ponds based solely on area is arbitrary and unjustifiable without considering other issues such as ground cover, slope, construction phasing, etc. We believe that the third bullet of paragraph III.G.2.d.ii. covers this issue adequately. Therefore, the requirement in this paragraph should be deleted.

Response: The Agency agrees that ground cover, slope, and construction phasing impact whether a sediment settling pond is necessary. Ohio EPA recommends stabilizing soil and phasing in projects to make sure that the total disturbed area in a common drainage location will remain under 10 acres. This requirement was in the previous permit. Originally, this requirement was created to clearly identify when a basin is necessary. Prior to this requirement, Ohio EPA found many sites where basins were needed, but permittees indicated that the permit requirements should be left to their judgment.

- (72) Comment: Part III.G.2.d.ii “Sediment Control Practices” - Please specify if floating discharge devices (i.e., Faircloth Skimmer) will be required to be exclusively used when temporarily retrofitting the outlet structure of a permanent retention/detention basin so that it serves as a sediment control practice during active construction periods. Many in the profession have been led to believe this would become a requirement.

Response: This is not a requirement of the permit.

- (73) Comment: Page 15, Increasing Sediment Pond and Drain Time, Part III.G.2.d.ii Since these proposed sediment settling zone addition will better capture and treat site water, Ohio EPA should allow other controls to be optional (some sediment fencing, check dams, etc.) for managing water that runs through such.

Response: Our intent is that all areas, which drain through a sediment settling pond, do not have to be protected with other controls. Only outlying areas not directed to a pond are intended for sediment controls such as silt fence.

- (74) Comment: Page 19, Part III.G.2.d.v. - The language about minimizing the number of stream crossings and width of same is vague and too subjective for design professionals, regulators and field inspectors to interpret

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consistently. The intent of this statement is already regulated by the USACE and OEPA by other means.

Response: We recognize this is regulated by USACE, however given the sensitivity of stream crossing, the Agency believes that it was necessary to emphasize the requirements.

- (75) Comment: Part III.G.2.d.ii - The inclusion of sections of ODNR's Rainwater Manual in the permit language changes what has been referred to as "guidance documents" to regulatory language. Though the manual contains a significant amount of information and alternatives regarding water quality improvements, each development site contains many variables that will lead a designer to select the most appropriate and economical measures for implementation to reduce sediment laden runoff. This decision must be left with the designers and should not be limited or prescribed by selecting specific alternatives from the manual for inclusion as permit regulation.

Response: The manual is referenced to ensure once a practice is chosen that it would be designed properly. The language in the permit does not mandate all conditions in the Rainwater and Land Development Manual to be met. Alternate controls outside the design criteria will be considered and are stated in the permit

- (76) Comment: Section indicates that settlement basins are required for all projects with "concentrated storm water runoff" i.e. from a pipe or ditch. By definition, basins would be required on every site, understanding that runoff is typically concentrated by design to a low point of release. This being the case, the impact on small one to five acre developments in Ohio is significant and costly. It is not practical to designate and reserve the area required as prescribed by this section, to construct temporary settlement basins on small construction sites without eliminating required parking or reducing building size. The result is greater cost to the development or potential elimination of certain development opportunities in Ohio. Manufactured units must be permitted to reduce the impacts on small development activities while enforcing reasonable and practical water quality measures. Accepted studies performed by recognized institutions have demonstrated the superior performance of manufactured units over several of the BMP's allowed by the permit. Routine maintenance of all BMP's is critical to proper function and can be ensured through the implementation of the MS4's SWMP.

Response: The Agency believes, based on staff inspection, there are many small sites which do not result in concentrated runoff; therefore utilizing perimeter controls would be sufficient. However, the Agency does not believe the use of a sediment trap as prescribed by the permit is not a costly

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control, given there is always equipment onsite to excavated the impoundment.

- (77) Comment: The addition of the required separate sediment storage zone impacts the size of the basin at a ratio of six feet of additional width for every additional foot of depth based on a maximum 3:1 side slope. On smaller sites, the requirement for maintaining sediment basins, including at every catch basin draining over one acre of ground, instead of permitting alternative and equally effective sediment control measures, does impact the overall property value, layout, and constructability of any given small site for efficient and effective development.

Response: Smaller sites may utilize a sediment trap which would address your concerns in this comment.

### Part III.G.2.e

- (78) Comment: The term "EDv" is not defined in the permit, but is used in the proposed requirement at the bottom of page 22. We suggest deleting this term. *Suggested Permit Language (Part III.G.2.e)*

Response: For the design of wet ponds and constructed wetlands in OHC000003, the extended detention volume (EDv) is 75% of the water quality volume (WQv) when the permanent pool for both is at least 95% of the WQv (including sediment storage). The other BMPs must treat the WQv including an extra 20% of WQv for sediment storage.

- (79) Comment: We support the requirement to implement post-construction BMPs for the purposes of managing storm water runoff from new roadway construction (Part III.G.2.e, page 23 of 40 of the draft permit). However, we feel that it is important for the permit to specify that BMP installation is allowed both on-site but outside of the road right-of-way, and off-site, as long as the BMPs are installed within the same 14-digit hydrologic unit code. In many instances, a project site might not have the necessary space to construct BMPs that provide sufficient treatment or adequately reduce runoff volumes. Even if there is sufficient space on-site, there may be situations where more appropriate sites for BMP installation exist off-site that allow for improved management/treatment of the runoff, not only from the new roadway, but also from other sources within the watershed (i.e. regional BMPs). It is important that the permit allow for the installation of alternative BMPs, off-site as well as on-site, if it can be demonstrated that equal or enhanced protection would be provided.

Response: The Agency has coordinated with ODOT regarding the locations of proposed BMP's. It was continually brought to our attention that all BMP's

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would be inclusive in the right of way, where maintenance could be ensured. However, if alternative BMP's placement outside the right of way is a better approach, based on site conditions, the permit does not preclude the activity.

- (80) Comment: Part III, G.2.e, page 24 - The third (3) criterion in the subsection entitled "*Offsite Mitigation of Post-Construction*" references "retrofit". It is unclear, however, what this term means and how it is applied. In addition, it is unclear how the WQv at the point of retrofit is to be determined. We recommend that the Agency provide guidance in the form of specific design examples.

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 which then could be used as mitigation, provided the point of retrofit coincides with the required value of mitigation required. Through the application of the WQv criteria of the general permit.

- (81) Comment: Offsite Mitigation of Post-Construction – An MS4 would like to see this modified to state "if allowed by the local municipality."

Response: As mentioned previously, it is stated within the permit that a local jurisdiction may be more restrictive than the permit.

- (82) Comment: OEPA needs to create standard forms for permittees requesting the use of offsite mitigation and approval letter if the applicant meets OEPA's requirements. A standard acceptance & notification letter should then be sent to the MS4 operator stating OEPA has accepted the offsite mitigation. Many MS4's have adopted a review process and policy (required under MCM #4 & #5) for post construction BMP's. If there is a deviation from this permit – the MS4 operator should be notified (in writing) by the OEPA of such approval.

Response: Mitigation alternatives do require an individual review by Ohio EPA staff and we would be looking for MS4 concurrence.

- (83) Comment: Section contradicts the implied importance of managing all storm water discharge from construction activity by allowing OEPA to selectively disregard the direct discharge of storm water from certain sites in exchange for mitigation efforts on other sites within the same tributary area. We agree that all construction activities should be reviewed from the point of what is a reasonable requirement to help mitigate storm water and sediment runoff without imposing impractical restrictions and regulations.

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Response: Mitigation will be reviewed on an individual basis to determine the appropriateness of the mitigation alternative. It is important to note the permittee must demonstrate on-site BMP's are not feasible.

- (84) Comment: Regarding post-construction BMPs for transportation projects, we recommend that the permit include language that allows, if not encourages, the concept of advanced mitigation – the installation of post-construction BMPs or other mitigation activities in anticipation of future transportation project impacts. By taking a proactive approach to mitigating impacts to the environment, high-quality sites that are under threat can be protected during the early stages of planning. Through advanced mitigation, the best available sites for habitat and wetlands mitigation can be identified and selected during the early planning process before transportation projects are implemented. We feel it is important for the General Permit to clarify that advanced mitigation is an acceptable approach to addressing storm water runoff from new roadway projects.

Response: The agency believes the permit as written would allow for this approach and also believes is a good idea.

- (85) Comment: **Transportation & Public Transportation** Projects - An MS4 suggested that Residential or Industrial/Commercial development requiring the construction of new public roads and/or roadway improvement projects to an existing public road, be allowed to use Ohio Department of Transportation's "Location and Design Manual, Volume Two Drainage Design" for post-construction BMPs.

Response: The purpose of the alternative post construction BMP's for public transportation projects was to address an impact associated with a linear project with limited right-of-way that might traverse multiple watersheds. The available space for BMPs and the type of impact from public roads that serve a subdivision or commercial/industrial site is quite different. The construction is generally in a single watershed where there is more space available for structural BMPs prescribed in the permit.

- (86) Comment: Is the approved ODOT list of hydrodynamic structures applicable to non-ODOT type projects? Or just publicly funded road improvements?

Response: It would only be applicable for publicly funded road improvement projects. All other alternatives must be considered in accordance Part III.G.2.e.

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- (87) Comment: It is understandable that this permit references the “Location and Design, Volume 2 Drainage Design” for public roadway construction standards; however, the permit rules need to be clear that the minimum regulated practice specified within the permit (e.g., Part III.G.2.e; particularly, Table 2) must be met. In other words, BMPs selected to address post-construction requirements should meet water quality volume and target draw-down (Table 2) no matter whether the project is a private, public, or combination endeavor.

Response: The agency realizes that it must consider alternatives which meet the intent of Part III.G.2.e. and believes it has done so regarding ODOT projects. Specific site conditions or unique situations may necessitate the need for such alternatives. The permit does require specific evaluation and individual review of any proposed alternatives to ensure the intent of Part III.G.2.e is met.

- (88) Comment: We respectfully recommend that Ohio EPA 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). During the hot dry summer months (particularly in southwest Ohio), it will be exceptionally difficult to maintain adequate depth and flow in these structures, and will very likely result in stagnant water conditions and mosquito issues. While forebays and micropools work very well with wet (retention) ponds, they may not be appropriate in all circumstances for dry ponds; therefore, we ask that this requirement be deleted.

Response: Ohio EPA highly recommends utilizing the design criteria in the Rain Water and Land Development Manual which addresses the concerns stated in this comment. Ohio EPA believes that the 20 percent sediment storage requirement is essential to ensure a point of removal for the accumulation of sediments resulting from extended detention; otherwise, there is a concern any sediment which settles will be re-suspended and discharged 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 by pass of the WQv. Also as previously mentioned an MS4 can limit which post-construction structural BMPs from Table 2 it will allow within its jurisdiction. Those that are allowed must meet the design requirements prescribed in the permit.

- (89) Comment: Part III.G.2.e Table 2 – Page 23 of 40 - Suggest permit language changes in bold and italics: \*Dry basins must include forebay and micropool each sized at 10% of the WQv ***plus 20% of the WQv for sediment storage and/or reduced infiltration capacity.*** \*Provide both a permanent pool and an extended detention volume above the permanent pool, each

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sized at  $0.75 * WQv$  ***plus 20% of the WQv for sediment storage and/or reduced infiltration capacity.***

Response: Language requiring a structural post-construction BMP to include an extra 20 percent of the WQv for sediment storage is already stated on top of page 21 of the general permit. For dry extended detention basins, this sediment storage area may be fulfilled in the forebay and micropool.

- (90) Comment: Part III.G.2.e Table 2 - Comments were received regarding setting a minimum orifice diameter size for ponds to prevent clogging to reduce maintenance.

Response: Again, MS4s may set more restrictive conditions on which Table 2 BMPs may be used or under what circumstances as long as those conditions are consistent with the design criteria, as in size and release rate, contained in the permit.

- (91) Comments: Part III.G.2.e - The permit seems to lump Water Quality and Quantity together, which doesn't seem correct, because drawdown is accounted for with the quantity requirement. Why require additional drawdown with quality when it's already provided with the quantity?

Response: The use of the WQv does address quality and quantity. The goal is to remove pollutants and protect receiving waters hydrology as stated at the beginning of Part III.G.2.e. If the WQv is properly calculated and the drain times are in accordance with the post-construction section of the permit, the agency is comfortable that the quality component will be addressed, provided there is a point of removal for the accumulated sediments such as the micropools and forebays on dry ponds.

- (92) Comment: Please provide guidance and clarification on the use of non-structural controls under Part III.G.2.e relating to exemptions for open space or sheet flow into protected areas. This seems vague and open ended.

Response: The intent was to evaluate existing site conditions and non-structural controls to facilitate the requirements of Part III.G.2.e. We intend to provide further guidance on our website. In the interim, any such proposals will require an individual review of the SWPPP

- (93) Comment: Part III.G.2.e. and Part III.G.2.f. - The draft permit states "...Structural post-construction BMPs cannot be installed within a State surface water (e.g., wetland or stream) unless it's authorized by a CWA 401 water quality certification and/or CWA 404 permit."

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The permit needs to address the potential of small headwaters being determined non-jurisdictional by the U.S. Army Corps of Engineers and therefore eliminating the need for authorization through a CWA 404 permit and CWA 401 water quality certification. It is suggested that, installation of a post-construction BMP in a non-jurisdictional water of the State (or State surface water) is not approved without prior agreement of Ohio EPA 401/storm water staff. Additionally the potential elimination of headwaters should be addressed as well as the conditions for relocating these resources. If this is effectively an individual NPDES permit, this may also need to be stated in the limitations of coverage.

Response: This issue is currently being addressed, requiring such applicants to obtain an individual NPDES storm water permit, to ensure adequate review

- (94) Comment: Part III.G.2.e - The draft permit states: "Construction activities, which do not include the installation of any impervious surface (e.g., soccer fields), abandoned mine land reclamation activities regulated by the Ohio Department of Natural Resources, stream and wetland restoration activities, and wetland mitigation activities are not required to comply with the conditions of Part III.G.2.e of this permit. Linear construction projects, (e.g., pipeline or utility line installation), which do not result in the installation of additional impervious surface, are not required to comply with the conditions of Part III.G.2.e of this permit. However, linear construction projects must be designed to minimize the number of stream crossings and the width of disturbance and achieve final stabilization of the disturbed area as defined in Part VII.H.1.

We suggest the addition of "reclaim soil quality" to mitigate for construction impacts such as compaction and inversion of soils during construction that would lead to increased runoff. The primary means of reclaiming soil quality would be the replacement of topsoil. The suggest sentence would read: "However, linear construction projects must be designed to minimize the number of stream crossings, and the width of disturbance, reclaim soil quality and achieve final stabilization of the disturbed area as defined in Part VII.H.1."

Response: The agency believes the stabilization requirement of the permit provides means to ensure the reclamation of soil quality. The replacement of topsoil would be inherent to the successfully establishment of a vegetative cover sufficient to control erosion

- (95) Comment: Part III.G.2.e (Page 23) - Table 2, Add notation to Bioretention. - The WQv shall completely infiltrate within 48 hours so there is no standing or residual water in the BMP.

Response: This is already stated previously in this section.

- (96) Comment: Part III.G.2.e (Page 23) - Reduce or modify the 40 hour drain time for bioretention practices. The 40 hour drain time was originally utilized, because the ASCE Manual of Practice for Urban Runoff Management recommended 40 hours as a drain time for sand filters. While sand filters have a sediment storage volume, which utilizes a settling as a primary pollutant mechanism, bioretention areas do not. Bioretention areas utilize filtering and are able to provide good pollutant removal with faster drain times than 40 hours provided the area is designed appropriately. ODNR is reworking design guidance for bioretention practices, so that sizing is appropriate and the design criteria reflect the actual processes at work in bioretention areas.

Response: Research conducted on bioretention cells which have been designed with the 40-hour drain time indicates that those structures have high levels of pollutant removal. Although filtration is one mechanism of pollutant removal in bioretention cells, it is not the only mechanism. Bioretention cells do indeed also remove pollutants through settling. This is the primary mechanism of TSS removal in bioretention cells. The surface area of a bioretention cell is also important for pathogen reduction. We are aware that North Carolina requires a 40-hour drain time, but a 12-hour drain is typically the time it takes for the runoff stored above the surface of the cell to disappear into the bioretention soil mix. Therefore, bioretention cells should appear "dry" after about 12 hours, but it will take about 40 hours for the runoff to completely work through to the underdrains. Bioretention cells are to be designed such that the full WQv is stored above the surface of the cell. Storage within void space within the filter media does not count toward the WQv. If ODNR can document that a shorter drain time is appropriate Ohio EPA would be open to revising the criteria.

- (97) Comment: Part III.G.2.e - BMPs are supposed to be done by a "qualified inspection personnel representative". What is the definition of this?

Response: "Qualified inspection personnel" is defined in Part VII.T of the general permit. Such personnel are familiar with the implementation, expectations, design and maintenance of the proposed BMPs.

- (98) Comment: Please provide a detail of the requirements for pocket wetlands in cross-section and plan view. If 75% of the water quality volume is required in shallow marshes within the wetland, this will create a very large surface area. For example, a 5-acre commercial site would have a WQv of 0.25 ac-ft. Typically, shallow marshes are design to be only 3-4" deep, therefore the surface area required for shallow marshes is roughly

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0.75 acres. Adding in additional area for the deep pool, side slopes, etc., the footprint of the wetland becomes 20% of the site or 1 acre of land. This seems unreasonable and difficult to site on a project. For wet ponds, only 75% of the WQv is required below normal pool, but wetlands require 100%, why? The water quality depth above normal pool is not a factor as the surface area is being dictated by the volume of water in the shallow marshes if the requirements have been interpreted correctly? The Georgia Stormwater manual, Pennsylvania BMP handbook, or the Mecklenburg County, North Carolina manuals are good references in regards to wetland design.

Response: Please recognize the use of constructed wetlands and the associated function is different than an extended detention facility. In order for the wetland to function as a true wetland there are specific constraints on regulating operational water levels. The 3 to 4 feet requirement as well as the mandate for the WQv is necessary for the wetland vegetation to establish. We recognize this would result in a large footprint as compared to extended detention but wanted to ensure the constructed wetland would function as intended. This option is only one in the BMP toolbox selection. The drawdown time begins at a full WQv (or EDv for wet detention). This drawdown, and whether the rate meets the no more than 1/2 the WQv in the first 1/3 of the drawdown time, is easily modeled with a spreadsheet. Other methods of hydrologic analysis may be used to evaluate the drawdown characteristics, but the Table 2 drawdown time requirement should begin when the WQv (or EDv for wet detention) is "brimful." (See Q&A #22 and Q&A Appendix B for more information).

- (99) Comment: Enhanced water quality swales and vegetated filter strips with drawdown times are essentially dry basins, as currently interpreted by EPA staff. What is the difference between these BMP's and a dry basin? The use of vegetated filter strips is usually for small areas and is modeled as a flow through BMP. Requiring a downstream embankment and water quality orifice will cause problems as the orifice may be very small and be a maintenance burden.

Response: Ohio EPA agrees that dry enhanced swales and filter strips are essentially dry extended detention basins. It's just really a matter of configuration of what will fit the site. Ohio EPA believes the terms "swale" and "filter strip" give the reader a better mental image of the structural configuration that is appropriate for small drainage areas. But, yes, to meet the 24 hour drain time associated with these structures, a small orifice will likely be included in the design. So special attention needs to be paid as to how the outlet structures are designed to minimize clogging. Wet enhanced swales are more like storm water wetlands, not dry basins.

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- (100) Comment: Flow through vegetated filter strips are an alternative BMP. Vegetated filter strips are commonly designed as a flow through device where the water quality peak flow rate is determined and the maximum depth for the water quality peak flow is the height of the vegetation. Knowing Q, slope, and manning's 'n' value, the velocity can be determined and then used to require a residence time in the vegetated swale, usually around 5 minutes minimum.

Response: The commenter is advocating the acceptance of flow-through designs for swales and filter strips. If Ohio's requirements for WQv and channel protection were separate, as they are under the Unified Sizing Criteria, Ohio EPA could accept flow-through criteria for pollutant removal, but a BMP for channel protection based on detention of a certain storm events would still be necessary. Separating these criteria for these BMPs results in a train of BMPs which may actually consume more land than the approach that Ohio EPA has taken by trying to address both concerns at once. Currently, we are not permitting flow-through vegetated filter strips and vegetated swales. We are permitting vegetated filter strips and vegetated swales that use a berm to capture and release the WQv over the required drawdown period. ODNR is currently working with OEPA to develop guidance for flow-through swales and filters, which will be added to ODNR's Rainwater and Land Development manual.

- (101) Comment: What is the difference between a bioretention basin and a rain garden?

Response: A bioretention facility is a BMP designed with specific design parameters to address water quality and infiltration. A rain garden is generally a conservation practice on a single family lot which is generally part of the landscaping plan. Rain gardens generally do not follow the specific design criteria found in ODNR's Rainwater and Land Development or other storm water manuals.

- (102) Comment: In what situations does the stream erosion potential requirement not apply?

Response: Hydrologic impacts to a receiving stream are negligible when: (1) The entire WQv is recharged to groundwater; (2) One or less acres of impervious area is created; (3) The site is a redevelopment project within an ultra-urban setting (such as a downtown area and storm water discharges are directed into an existing storm sewer system); or (4) The site discharges to a lake or a 4<sup>th</sup> or higher order stream.

- (103) Comment: What is the definition of Ultra-Urban?

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Response: Generally speaking downtown areas which are entirely developed as in the vast majority of land has been built on or paved over.

- (104) Comment: Pervious pavement is not an approved BMP. What are the concerns with pervious pavement?

Response: Meeting appropriate drain times, maintenance, and removal of accumulated pollutants. If the runoff from the first 0.75-inch rainfall is removed from the runoff hydrograph, then the greatest concerns are that ground-water will not be subject to pollution and that the practice will be sustainable in function over time.

- (105) Comment: Would the OEPA consider a dynamic analysis of the drawdown time requiring the drawdown to be 24 hours after the peak when analyzing the pond elevation over time? The current static method overestimates the required volume in the pond as it assumes no outflow occurs until the pond reaches the water quality elevation. The Mecklenburg County, North Carolina BMP manual is a good reference for dynamic water quality drawdown modeling.

Response: Ohio EPA would consider this alternative in consultation with ODNR.

- (106) Comment: PART III. G.2.e. Table 2 - Table 2 references certain types of BMPs. To avoid confusion as to their meaning, we propose adding definitions for the following terms: "enhanced water quality swale"; "pocket wetland"; and, "municipally operated regional storm water BMP".

Response: The agency will look to better define these terms in our post-construction Q&A document that is on our web site.

- (107) Comment: In the subsection entitled "*Non-structural Post-Construction BMPs*", language was added which illustrates practices which reduce storm water runoff. Among them were "permeable pavements." To avoid misunderstanding, we propose adding a qualifier for permeable pavements as follows: "... [permeable pavements] where no storm water discharges from the site and such drainage entirely infiltrates into the sub soils..." Permeable pavements atop certain types of soils are ineffective.

Response: Our intent for permeable pavement installation would effectively reduce the run-off coefficient resulting in a reduced Water Quality Volume

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- (108) Comment: The first paragraph under Table 1 states “Ohio EPA recommends.....methodology included in the Rainwater and Land Development manual or in another design manual acceptable for use by Ohio EPA.” How does an MS4 get its manual approved or designated as acceptable?

Response: MS4s are welcome to submit their manuals for Ohio EPA review or they will be reviewed during an MS4 audit.

- (109) Comment: Regarding the contaminated soils, we, as an MS4, do not wish to act as an intermediary on this issue unless it involves a project we are funding.

Response: If an MS4 believes a proposed project will disturb contaminated soil it should contact Ohio EPA immediately.

- (110) Comment: Page 20 of 40 – Part III.G.2.e - If truly trying to protect and maintain the receiving stream’s physical, chemical, and biological characteristics by ensuring the post-construction storm water practices provide perpetual management of runoff quality and quantity then incorporation of Ohio’s Critical Storm Method for storm water management is necessary.

Response: The agency feels the development of the WQv value is more appropriate since treatment is provided for all storms 0.75 inches or less. This represents more than 80 percent of the storm events in the state of Ohio.

- (111) Comments: Our issue with the water quality volume requirement; if the equation is based on findings that a detention basin had to be designed to empty out a volume equal to the average runoff event’s volume in no less than 24 hours to capture and remove a majority of storm water pollutants on an average annual basis, is it fair to use this equation for all structures, in all instances? Take for example, a site where multiple BMP’s would be used to capture parking lot run-off, lawn areas and green roof run-off separately. Would it not be correct to say that the runoff from the green roof would be free of most sediment? If further treatment was necessary, couldn’t treatment of a fraction of the water quality volume produce the necessary results?

Response: The intent of the water quality volume (WQv) is broken down into two major components, “pollutant removal” and “stream protection”. The WQv is captured and released over a 24 to 48 hour period to settle out suspended solids with pollutants attached to address the “pollutant removal” component. The WQv is then released over a 24 to 48 hour

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period in order to mitigate for stream erosion which results from impacts of urbanization. The agency understands run-off from green roofs may be cleaner, however the stream erosion component would still exist. The WQv is based on the run-off coefficient. The WQv would be reduced with the presence of a green roof, given the run-off coefficient would be less.

- (112) Comment: Part III.G.2.e – Page 21 of 40 - However, linear construction projects must **obtain an NOI per Part II.A if land disturbance is one or more acres, must** be designed to minimize the number of stream crossings and the width of disturbance, and **must** achieve final stabilization of the disturbed area as defined in Part VII.H.1.

Response: This section of the permit deals with special post construction requirement exclusions. All other conditions of the permit would apply to linear projects, including when to submit an NOI. The permit language was not revised as suggested.

- (113) Comment: Part III.G.2.e - Post-Construction Storm Water Management Requirements This section of the permit requires that Best Management Practices (“BMPs”) “be sized to treat the water quality volume (WQv)” and provides an equation for computing the appropriate WQv. As it stands, the draft permit appears to permit the use of only two equations for calculating the appropriate runoff coefficient for storms less than 1 inch when there are many other calculation methods that are commonly available and published data and tables exist that are more comprehensive than Table 1. Accordingly, the Utilities recommend that Ohio EPA revise the draft to include these alternatives. This will provide greater flexibility to the regulated community while still ensuring that permittees rely on credible calculations and published tables.

Response: Ohio EPA evaluated alternatives and felt the two equations represented in the permit better reflects the treatment potential for BMP’s associated with very frequent storm events. This was evaluated in conjunction with Ohio Department of Natural Resources.

- (114) Comment: Variables such as soil type greatly impact the ability to use some of the suggested measures. Infiltration basins are an impractical technology to include as a primary BMP for many Ohio areas under development where impermeable clay soils are not conducive for this design.

Response: Ohio EPA believes in the situation described amenable soils could be used in conjunction with an underdrain system making infiltration BMPs a viable option.

**Part III.G.2.f**

- (115) Comment: The table that designates the drawdown times appears to not allow dry extended basins, wet extended detention basins, constructed wetlands or infiltration basins for any project under five acres. Will sites under five acres be permitted to use these BMP's if following the allocated drain times?

Response: The table has been revised to allow for the use of these BMPs on smaller sites.

- (116) Comment: Part III.2.f. - This section requires that the "applicant shall attempt to match the pre-development hydroperiods and hydrodynamics that support the wetland." What criteria will Ohio EPA use to determine if the applicant achieved the appropriate match between the pre-development hydroperiods and hydrodynamics. Additional modeling/methodology guidance is needed to assist applicants in complying with this requirement.

Response: Currently, the agency will evaluate the drainage areas associated with the wetlands and determine if any discharges to the wetlands will be erosive in nature. The volume of water discharging to a wetland may also be evaluated. The drainage area associated with the wetland should equal prior to and following construction. No wetland, other than a constructed wetland may be used to receive drainage from the project without treatment as prescribed in Part III.G.2.e of the permit.

- (117) Comment: Ohio EPA should require that sensitive areas, such as wetlands and riparian areas be protected. Minimum riparian setbacks for all sizes of streams and minimum wetland setbacks based on the quality of the wetland need to be established and scientifically justified.

Response: Extended buffer zones are requirements of watershed specific construction storm water general permits where the required buffer zone is validated through the TMDL process. It is the Agency's intent to consider watershed permits in response to specific TMDLs.

- (118) Comment: Part III.G.2.f Surface Water Protection - This section requires the permittee to contact the District Office of the U.S. Army Corps of Engineers whenever they seek a permit for project sites that contain streams, rivers, lakes, wetlands, or possible wetlands. For areas surrounding the Ohio River, this section lists Louisville, Kentucky as the District Office. However, the district boundaries have changed, and the Huntington, West Virginia District Office now regulates those areas in Ohio formerly regulated by the Louisville Office. The district boundaries for the

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Louisville and Huntington Corps of Engineers have changed and Huntington now regulates the areas in Ohio formerly regulated by Louisville.

Response: For direct discharges to the Ohio River, the Louisville Army Corp. of Engineers remains the point of contact. The Great Miami River and Little Miami River watersheds were re-assigned to the Huntington Office.

- (119) Comment: Last half of “Surface Water Protection” – Part III.G.2.f - You cannot specify discharge requirements without specifying a design storm, or at least indicating whether you are talking about just WQv discharges or if it’s something beyond that. It needs to be made clear whether these non-erosive flow requirements will apply to flows that bypass the BMP. Otherwise the rule is less meaningful and open to every designer’s (and reviewer’s) interpretation.

Response: The intent here was to provide erosion protection for the outlet of the storm sewer as it enters the wetland. The same requirement is intended for permanent pond outlets. In the event erosion is encountered due to erosive flows from a significant storm event. Maintenance is expected. The same would apply to discharges to wetlands.

- (120) Comment: Page 26, Part III.G.2.f. - This section requires the permittee to contact the Army Corps of Engineers if the project site contains certain water bodies. This should be changed to the permittee is required to perform the required notification as is appropriate based on the proposed construction activity. The project may contain these water bodies, however, the plan may not include activity in these areas. Also, some construction activities only require post-construction notification.

Response: The agency understands your comment; however, we felt it was imperative for the permittee to make contact to the ACOE to ensure the appropriate permitting avenue is addressed. It has been Ohio EPA’s experience on many occasions that CGP permittees were completely unaware of their permitting obligations under 404/401

### Part III.G.2.i (Inspections)

- (121) Comment: Could the EPA provide a standard inspection checklist?

Response: Yes, the agency will provide a link to standard checklist on our Web Site.

- (122) Comment: The “qualified inspection personnel” (*insert: refer to definitions in Part VII item t*) shall perform testing to determine if critical tasks such as de-watering within State Surface Waters, and sediment basins are functioning properly. The test results shall be documented and shall be made available immediately upon request of the director or his authorized representative during working hours.

Response: This permit is not based on effluent limits as traditional NPDES permits are written. The permit is based on the implementation of Best Management Practices (BMP’s) in accordance with the permit conditions. There is permit language that de-watering must be preformed so as not to create turbid discharges to waters of the state.

### Part III.G.3

- (123) Comment: Page 31, Part III.G.3. - Attached is a USEPA Memorandum dated May 8, 2006 (with attached Fact Sheet) describing the USEPA’s “Qualifying Local Programs (QLP)” provision. The OHBA believes that such a program should be included as part of this permit. The provision streamlines state stormwater permitting programs and, more importantly, it simplifies matters for permit holders by giving them one set of requirements to follow if they should be subject to both state and local storm water requirements. The OHBA recommends that the QLP provision be added to the storm water permit to recognize storm water programs at the local level that meet or exceed the state permit requirements.

Response: Ohio EPA believes U.S. EPA’s QLP approach is not as useful as the OHBA believes; therefore, Ohio EPA has pursued an alternative approach which it believes will accomplish a broader goal that will be beneficial to permittees, MS4 localities, and Ohio EPA. U.S. EPA’s approach would have Ohio EPA review each regulated MS4 seeking QLP construction program status to determine if it is equivalent to the state program. If judged to be equivalent, then the CGP would be modified to acknowledge that locality, and this would only apply to the earth disturbing related requirements. Ohio EPA’s approach in the draft MS4 general permit is to have MS4s adopt technical requirements that at a minimum are equivalent to state issued construction general permits regarding earth disturbing and post-construction requirements. After which, Ohio EPA would leave it to the MS4 to implement the programs. Ohio EPA would only be involved within those localities during an MS4 audit or if we receive a complaint that the MS4 is not implementing its ordinances.

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### Part III.G.4

- (124) Comment: Part III.G.4 - How will Ohio EPA be approving exceptions and alternatives since you don't required submittal of the SWPPP?

Response: If the SWPPP can not be developed in accordance with the permit conditions, the permittee is obligated to seek approval of an alternative by Ohio EPA

- (125) Comment: And again, how long will it take to gain approval?

Response: All attempts to approve or deny alternative will be within the 21 day submittal date of the NOI. However, we do encourage the permittee seek approval of alternatives prior to NOI submittal

### Part IV

- (126) Comment: In general, we do not believe that it is possible to “have a maintenance agreement...to ensure all post-construction BMPs will be maintained in perpetuity.” In specific, when we construct a project, it will not have a maintenance agreement. We request that this language be stricken.

Response: The maintenance agreement requirement remained in Part IV of OHC000003 because we believe it critical the BMPs be maintained. We are open to other mechanisms to ensure BMP maintenance is performed.

### Part V

- (127) Comment: Part V.L - The required sixty day prior notification to transfer coverage seems extremely long compared to the initial 21 day period?

Response: Ohio Administrative Code (OAC) Rule 3745-38-09 requires the submittal of a general permit coverage transfer application form at least 60-days prior to ownership change. Ohio EPA will consider changing this timeframe, in accordance with federal regulations, when the rule comes up for its state mandated five year review within the next couple of years.

- (128) Comment: Part V.G.1.c. - In the “*Signatory Requirements*” subsection, language in the permit provides that for a municipality, state, federal, or other public agency, either the chief executive officer of the agency or the senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency may sign NOIs, NOTs, SWP3, reports, and certifications of information. However, absent from the list of

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authorized persons are “duly authorized employees” as prescribed in OAC 3745-38-06(D) and 3745-33-03(E)(4). This group of authorized signatories should be added to the list.

Response: Part V.G.2 of OHC000003 allows a duly authorized representative of the person described in Part V.G.1 to sign all reports including NOIs, NOTs, SWP3s, and certifications.

### Part VII

(129) Comment: Part VII.T. The definition for qualified personnel is too ambiguous and the Agency should consider a mandatory minimum certification program that the qualified personnel are expected to have.

Response: Ohio EPA believes adding a certification requirement would need to be in law, the Ohio Revised Code, before being included in a general NPDES permit.